

# MEDICAL AND SURGICAL REPORTER

No. 1767.

PHILADELPHIA, JANUARY 10, 1891. VOL. LXIV.—No. 2.

## CLINICAL LECTURES.

### ACUTE PARENCHYMATOUS NEPHRITIS FOLLOWING WHOOPING-COUGH.—CHRONIC PARENCHYMATOUS NEPHRITIS MISTAKEN FOR CHLOROSIS.

BY W. C. HOLLOPETER, M. D.,

CLINICAL LECTURER ON DISEASES OF CHILDREN IN  
MEDICO-CHIRURGICAL COLLEGE, PHILADELPHIA.

#### Nephritis after Whooping-Cough.

*Gentlemen:* You will recall this case as the one I had before you a few weeks ago, when I was illustrating the sequelæ of whooping-cough. The child is but three years old. The mother held the belief, so common among many of the laity, that the doctor can be of but little use in relieving or curing whooping-cough. Hence the little boy has been permitted to encounter a stormy disease unaided, a storm so violent that nearly every organ in his body has become involved in consequence.

You will recall the fact that, when I first presented him to you a few weeks ago, he was very weak and miserable, besides showing a marked anemic condition, the result of his recent severe illness. He has a perforated membrana tympani, and, as the natural accompaniment, a purulent otorrhœa; also an oblique inguinal hernia of the worst possible character—the abdominal rings have been so far dilated that the omentum has followed the spermatic cord down into the scrotum, and by long-continued friction incident to the cough has formed inflammatory adhesions of so firm a character as to preclude, at least for the present, any hope of reduction. The chain of cervical lymphatics is also enormously enlarged, extending from the mastoid process down to and below the clavicle, and entering the medias-

tinum. This enlargement of the bronchial glands has induced a constant cough by pressure on the tubes, and the condition was for a time very suggestive of bronchopneumonia. The cough had ceased, however, and the child was apparently improving. Two weeks ago the cough reappearing, grew rapidly worse, and, in conjunction with it, the child commenced to vomit, but not very frequently at first. He was irritable, slightly feverish, and had lost his appetite. These symptoms continued for a few days; fever of not an unusual type was present for one day; the child was restless and very irritable, vomiting constantly for one whole day, and with his sleep much broken. At the expiration of the first forty-eight hours, the fever, vomiting and persistent cough diminished, the urine was now noticed to be lessened in quantity; and by the third day, when the fever and vomiting had entirely ceased, the urine was completely suppressed. The face was now ashy pale; the eyes were sunken and dull, and the lids appeared full and swollen. About this time it was noticed that the most dependent portions of the body commenced to show a dropsical accumulation. In this sluggish, stupid—I might say comatose—condition, the little fellow remained for two days, and during all that time he did not void one-half an ounce of urine. A blanket wrung out of hot water was used to envelop him, while hot poultices were placed over the back, and sinapism to the feet and legs. Milk and water was his only food. Small doses of calomel, frequently repeated, were exhibited, until he had a free action of the bowels. This acted as a derivative to his head, and as a vicarious means of unloading the renal pressure. One drachm of Rochelle salts was also exhibited in hot water for the same purpose. Slowly the kidneys resumed their function. At first the urine was scanty, very dark and coffee-colored, smoky from the blood it contained; but as the quantity in-

creased, the color became lighter; the dull, shapeless face assumed a more intelligent expression; and the sluggish condition of the boy became less marked. The outlines of the eyes and nose grew more natural; and with the gradual dawn of intelligent expression there was a subsidence of all the nervous symptoms; and thus our little patient had at last passed through the acute stage of parenchymatous nephritis.

Acute nephritis, called parenchymatous or desquamative nephritis, you will find is an almost constant sequela of scarlet fever. It also frequently follows measles, diphtheria, small-pox, and occasionally typhoid fever; but it is extremely rare to find it following whooping-cough. I have been unable to find any mention of in the text-books. In the light of modern investigation relative to the acute infectious diseases of children, it has been proven that in most, if not in all of them, systemic infection occurs through ptomaines, or the poisonous chemical agents which are produced by the action of microbes in the system, which are the original specific principle.

The symptoms of acute nephritis differ according to the causes that produce it. If it follows the specific diseases that I have mentioned, its onset is much obscured by the previous indisposition of the patient, as was illustrated in our present case. If it follows scarlet fever, the convalescence is of necessity greatly retarded. We scarcely know why the child has been so poorly, until perhaps we make some inquiry concerning its urine, when we notice that it is suppressed or scanty, or, perhaps notice the commencing dropsy. The child may cough—in fact, this child had scarcely got over the habit of coughing which so frequently follows pertussis, when the fever, the cough and the suppression of urine announced the kidney complication. You will recall the physiological relation that the skin and kidneys bear to each other. You can understand how we may have acute nephritis ushered in. When the child is perspiring at play, sits down to rest, and is subjected to a draft, or it takes a cold bath and a sudden suppression of the urinary secretion is the result, the whole burden of the excrementitious material is thrown on the kidneys; congestion and inflammatory action is sure to follow.

An analysis of this child's urine as it now is gives us the following result: Quantity passed during the twenty-four hours, ten fluid ounces; color, dark brown; odor,

strong; albumin, 10 per cent. by volume; blood present in small quantity; a small quantity of mucus. Microscopical examination reveals epithelium, mucus, blood-fibrin and hyaline casts.

### Nephritis Mistaken for Chlorosis.

Our second case illustrates a train of symptoms that we rarely meet with among children. This child, that I now bring before you, has been ill for two years. Her history is briefly as follows.

Minnie H., 15 years old; father and mother both living and in fair health. They have lost no children, and the family history is good. Minnie has not been sick since her third year, when she had measles. This disease, however, was not attended by any of the usual complications, such as acute nephritis, or ear trouble, or enlarged glands. She made a good recovery, so far as her parents could judge. Following measles, the girl has had a long period of perfect health, up to her thirteenth year. She was at this time full of spirits and life, enjoying play, and seeming as natural as is usual for a girl of her age. She had a fair color, although she was never of a rosy complexion. Her appetite was good, although she did not enjoy her food as a child of her age should. About two years ago she was noticed to grow less active; her disposition becoming more quiet and somewhat sluggish; her appetite, at the same time, grew indifferent; her desire for companionship grew less; in fact, she became irritable in temper and morose in habit. She avoided companionship. When her girl friends would call on her, their presence seemed to excite her, rather than to give her pleasure. She seemed to be better content to be alone than in their company. She is a day dreamer. She will now sit all day long gazing out of the window into vacancy; and if you ask her what she is looking at, she will scarcely be able to tell you. Her temper has also changed, she being easily annoyed. She will grow angry and excited if opposed, or cry, if scolded. Any unusual sight on the street, such as a drunken man, or fighting dogs, will greatly excite her and render her sleep troubled and broken. She has been in this stupid condition for nearly two years, it is slowly but surely becoming more marked.

During this interval she has been treated for malaria, bronchial catarrh, and finally for amenorrhoea.

I saw this girl for the first time one week

ago, when I elicited the history that you have just heard. I was inclined to make a diagnosis of chlorosis—a very common complication of puberty. There was a heavy, fetid odor about the girl's breath or person, that suggested a purulent discharge, either from the ear or throat. Careful examination revealed neither ear nor throat trouble. She was soft, white, anemic, yet not dropsical. She appeared to be stupid, as she sat in the chair and answered my questions in monosyllables. I could discover no dropsy. The heart was greatly accelerated on examination, as would be natural in anemia. I thought it might have been increased somewhat by my examination. The girl is well developed for her age; the mammary glands are fully enlarged and all the evidences of maturation have been reached. The mother tells me she has never seen her monthly expression. Thinking I had simply a case of chlorosis, or amenorrhœa, I prescribed a pill ferri carbonates and arsenic. The mother informed me at her first visit that she had repeatedly asked the doctor about the girl's water, saying it was scanty, and that she passed it with difficulty and that it was offensive. The day after her first visit, I was hastily summoned to her bedside, when I found the following condition. The girl was unable to lie down, but maintained a semi-recumbent position. The heart's action was intensely accelerated, running at the rate of 140 beats a minute. Dyspnoea was painfully great. She was unable to retain a recumbent position at all, and could find comfort only in leaning forward and supporting herself on a chair. She complained also of sharp pain in the region of the heart. On inquiry I found the urine entirely suppressed. I ordered a counter-irritation over the heart, and, as she had a temperature of 103° and thinking it was a case of pleurisy, I gave her three grains of acetanilid and one-fourth grain of calomel every hour. At the expiration of six hours I was again summoned. Her symptoms were not improved; indeed she was in a still more critical condition. The pulse was so rapid that it was scarcely perceptible; the dyspnoea was greatly increased; the position that she now assumed was almost a hanging one, forward; the stabbing, lancinating pains in the region of the heart were intensified; her cough was dry, short and constant. At this time I ordered a fly-blister over the region of the heart, and also made inquiry in regard to the urinary secretion.

The mother informed me that it was still suppressed. Eight hours after the second visit I saw her again, and found the symptoms still exaggerated; her lips were blue; her face was blanched, approaching lividity; the muscles of the chest were laboring frantically; the radials were imperceptible; the pain was still intense; the cough was short and dry. She was in a state of collapse. A short time after this some relief was apparently manifested in the expectoration that she coughed out, as it was tinged with blood. This increased until the mucus expectorated was about one-half blood. The bloody expectoration, light and frothy, continued for fully eight or ten hours, when it gradually subsided, and with it all the distressing symptoms.

Without going further into details, we have here, gentlemen, a case of pericarditis, left pleurisy and acute bronchitis as a result of chronic parenchymatous nephritis. Chronic parenchymatous nephritis rarely follows the acute form. It is also a disease of youth and is seldom found after thirty-five years of age. It is usually induced by some constitutional defect or depressing surroundings. These symptoms occurred in the order I have named, simply by extension, and gradually subsided. We obtained a urinary analysis at this time, and found that the girl was passing, on an average, about three or four ounces of urine per day. This continued for a few days, when, under active treatment, it gradually rose until twelve ounces had been reached. You will remember that from forty to fifty-five ounces is the usual average in health. A careful analysis shows the following results:

*Physical Characteristics.*—Quantity in 24 hours at this time twelve fluid ounces; color, pale; condition, sedimentary; reaction, neutral; specific gravity, 1.014; total solids, 10.87 grams.

*Normal Ingredients.*—Sulphates, normal; chlorides, normal; indican, normal; earthy phosphates, diminished; urea, diminished; alkaline phosphate, diminished; uric acid, increased.

*Abnormal Constituents.*—Albumin, in amount about half the volume; no sugar.

*Sediment.*—Crystals of urates, few phosphates; granular and fatty casts.

The diagnosis in a child of this age between chronic parenchymatous nephritis and chlorosis or ordinary anemia presents a very difficult problem. Barthow says that "girls at the age of puberty are generally



subject to chlorosis. They may be with or without disorders of menstruation. The affected person experiences a change of her feelings, becomes morose or despondent and capricious, vibrates from the extreme of high spirits to corresponding depression; but low spirits is the habitual state of the largest number."

You will notice how closely this definition of chlorosis has been followed out in the patient before you. At the present time, however, all the chest symptoms have subsided, except a little bronchial catarrh and pleuritic friction sounds. She is still pale as you see her, and still somewhat swollen; her face is expressionless and shapeless. The heart is still beating at the rate of 120 or 130, and the urine still remains decidedly below the normal in quantity, and is loaded with albumin.

A hint is desirable here in regard to the treatment. After the counter-irritations and the poultices, and the sweating, to tide over the acute spell, infusion of digitalis and strychnia were exhibited. Digitalis is theoretically contra-indicated, as you know, by reason of undue pressure exerted on the renal structure. I withdrew it, and gave her Basham's mixture, combined with strychnia; but at the expiration of twenty-four hours I found this would not relieve her, as she complained of pain and numbness, and the urine seemed to be lessened in amount. She has therefore resumed her infusion of digitalis and strychnia; and, by careful attention to clothing and exercise, and by limiting her food to milk, we hope to improve her general condition.

### WHOOPIING-COUGH.—GREEN STOOLS OF CHILDHOOD.<sup>1</sup>

BY H. A. HARE, M. D.,

CLINICAL PROFESSOR OF DISEASES OF CHILDREN IN  
THE UNIVERSITY OF PENNSYLVANIA.

*Gentlemen:* The first case I wish to show you to-day is one of whooping-cough. Whooping-cough is the third most important disease of childhood. According to statistics taken among the children of England, the greatest mortality is found to be due to scarlet fever, the second greatest to measles, and the third to whooping-cough, while in

London pertussis is second in importance. But little is known of the etiology of this disease, further than that it is very probably due to some micro-organism which has not yet been isolated. A number of micro-organisms have been claimed to be the causative agent, but some who have investigated the matter pronounce them in no way different from bacteria found elsewhere. We know, however, that whooping-cough is a distinctly contagious disease. If whooping-cough breaks out in a neighborhood, all the children of that neighborhood will probably be affected. It runs a course of from six to eight weeks, and if the child is under two years of age the prognosis is unfavorable. We know, also, that the prognosis depends upon the severity of the attack and the strength of the child. The pathological appearances of the air passages macroscopically do not differ from those of ordinary bronchitis.

Upon listening over the chest, we hear râles, more especially at the base posteriorly, and after a whoop these râles are increased in intensity and are more diffused, showing that some mucus has been dislodged in the bronchial tubes by the effort of coughing. Some cases of whooping-cough whoop every five or ten minutes, or even oftener, and in some children there seems to be a constant convulsive condition of the whole respiratory tract. In other cases the whoop occurs but once in twenty-four or forty-eight hours. In treating these cases of whooping-cough it is often essential that the child be pampered to some extent, since anything which tends to cause it to cry will bring on a spell, and the child will become exhausted. When once you hear the cough of this disease you can never mistake it for anything else. There are two varieties of cough; in the first place there is the whoop which gives the name to the disease, and in the second place there is a dry, hacking cough which precedes the whoop. It is by the latter that we make our diagnosis in fifty per cent. of the cases we see, which are brought to us in the early stage of the disease. This primary cough, which comes on days before the whoop appears, is as characteristic as is the whoop. It occurs in from fifteen to twenty short respiratory movements, and in the advanced stage of the disease is followed by the characteristic whoop. We distinguish this primary cough from the cough of the first stage of bronchitis, by the fact that the latter is harsher and more rasping than is the

<sup>1</sup>Delivered at the University Hospital.



whooping-cough. This first period of the disease lasts for an indefinite time, but in time a slight increase in the inspiratory sound following the cough is heard, which gradually develops into the characteristic whoop which can be heard for a remarkably long distance.

Whooping-cough cannot be cured any more than can typhoid fever. Neither can we prevent children from taking it, except by isolating the cases which are affected. It is claimed, however, that small doses of quinine seem to exert a slight prophylactic action, protecting children who have been exposed to a certain extent. Quinine, it is known, has a distinct anti-bacterial or germicidal effect, and in the case of any adult who has never had the disease and who is exposed to this infection, a weak quinine spray to the fauces may be beneficial in averting an attack if the patient is willing to stand the bitter taste of the drug. This treatment has also been recommended highly for children, but it is practically impossible to use a spray upon a child. We must, therefore, either force the child's mouth open and paint the fauces, or we must rely upon the drug given by the mouth, together with some anodyne. I do not mean to say that whooping-cough is a disease affecting the fauces, but that treating the fauces in that way seems to alleviate the trouble greatly.

Pneumonia and exhaustion and capillary bronchitis are the two conditions which most frequently kill these children, especially if they are young children. Whooping-cough rarely, if ever, produces a fatal result directly from suffocation. If we do find a case in which the cough is exceedingly severe, we may use inhalations of the nitrite of amyl on the hand or upon a handkerchief. Two to three drops of the drug is sufficient. Another treatment highly recommended is the inhalation of chloroform. This is disagreeable to children, and if employed the proportion should be five parts of the chloroform to ninety-five of air. Ringer recommends pouring half a drachm of the chloroform upon the hand of the nurse and holding it under the child's nostrils. The child will soon learn to take a couple of whiffs, enough to postpone the paroxysm. There is no danger in this unless the child has a weak and dilated heart. The only disadvantage connected with its use is the placing of a dangerous drug in the hands of the people. Children often come to learn of the relief chloroform affords and run to their

parents for it when the paroxysm is coming on.

In certain cases in the lower walks of life we cannot use these drugs because of the cost and the danger. We then resort to antipyrin, which I regard as the best remedy discovered in the treatment of whooping-cough as yet. Occasionally we must push it until we get the physiological effect, two grains every three hours to a child of 10 or 12 until we get the effect, and then every four or five hours. We must watch the effect of the drug carefully, stopping on the appearance of any bluing of the face or finger-nails. If I were giving antipyrin to a child of this age, and were to sit down near it, I should not notice the cyanosis probably, while were I to sit at a distance from the patient it would be quite distinct. This is a curious effect of the drug which I have frequently noticed. Usually the cyanosis first appears under the thumb-nail, as it does when using antifebrin, but the fingers are often blue from cold, and it is best to notice the face. For a child of this age (4 years) I should give one grain in water every two or three hours.

Often children with whooping-cough suffer with fever at night, which may be severe. In such cases we use antipyrin, stopping the use of the drug at once if profuse sweating is produced, as this further exhausts the patient. We know that any drug which produces sweating acts as a depressant upon the system. Antifebrin, phenacetin and the other coal-tar products probably also exert some favorable effect upon whooping-cough, antifebrin positively so. But they are all more dangerous than antipyrin, and must be given in smaller doses. Before the introduction of antipyrin, belladonna, small doses of opium, and other antispasmodics were used in this disease. Potassium bromide is of great service, especially at night, to produce sound sleep. It is well to use the bromide at night together with antipyrin during the day. Belladonna does good by decreasing reflex action. It was formerly supposed, and probably it is so, that the whoop was produced by some reflex irritation of the bronchial mucous membrane. It is due to a closure of the glottis followed by a very sudden inspiratory effort. It is, in fact, a long drawn-out hiccough, without a total closure of the glottis as in hiccough, but only a partial closure through which the air rushes with the production of the characteristic sound.

In some cases of whooping-cough ecchymoses occur, especially in the conjunctivæ, and at times hemorrhages occur, from the throat, nose, or hemorrhage occurs from the ear. On the other hand, some cases are attended by no bleeding at all. From a study of the physiological effect of aconite and veratrum viride I have thought that in these cases of hemorrhage we may by using these drugs produce a fall of the arterial pressure and thus prevent the occurrence of the bleeding. The asphyxia produced by the violent coughing gives rise to a rise of arterial pressure, and a rupture of the small blood-vessels follows with the production of ecchymoses. Now, by giving graduated doses of these drugs we may be able to prevent this terrible strain upon the heart and arterial system and thus prevent this complication.

The symptoms of an oncoming pneumonia are sometimes those of the catarrhal form, sometimes of the croupous. This comes on because the chest and lungs are weakened and congestions readily occur. If the pneumonia occurs in a week or two weeks after the commencement of the disease, it may be a croupous inflammation, but coming on late in the course of the disease it is generally catarrhal in nature, often bilateral, and affecting usually the lower lobes posteriorly.

The parents generally inquire as to how long the child will be sick with pertussis and you can safely say six weeks at least, or perhaps it may be eight weeks. German writers put the limit at sixty-two days, and during this period the child should be isolated as far as possible from other children. Occasionally in the course of the disease the child will swallow a large amount of mucus. A gastro-intestinal catarrh results and a lenteric diarrhœa follows, the child dying rapidly of exhaustion. With every cough the child will have a passage, and it will cough every five or ten minutes. Such cases are very discouraging.

#### Green Stools.

The next case I have to show you is one frequently met with in the treatment of children's diseases, and very readily cured if seen in the first stage, but if badly treated it will run on and may develop into cholera infantum. This baby came in with this history. It has always been breast-fed, and has always been well. A few days ago it was given some crackers or cake, and a few

days later its stools changed from the normal infantile passages to small and large watery discharges containing curds of milk, and staining the diapers green. The passages were either passed green, or turned green within five minutes, a condition indicative of fermentation. This condition always arises from a torpidity of the liver. As a rule we get a history of obstinate constipation occurring for a few days before the attack. Practically, therefore, it is a case of biliousness. The child is constantly taking food; this is not digested, and passes out as curds, thus giving rise to a lenteric diarrhœa. Generally one grain of calomel divided into twelve powders, and one given every fifteen minutes until one-half a grain is taken will cure the condition. After giving this, warn the parents not to be alarmed if the child has an increase of its diarrhœa, with passages even worse looking than they were before. One or two hours after the calomel has operated give a very small quantity of bismuth, two or three grains every hour, till the patient has taken four or five doses. The calomel sweeps out the fermenting mass and stirs up the liver; the bismuth is slightly astringent and also antacid. If these cases are treated in the early stage in this way in ninety-nine out of a hundred we can get a cure in twenty-four hours. If not so treated they are apt to develop into severe cases of serous diarrhœa.

If any pain exists, as did in this child's case, we may have to use small doses of sulphate of magnesia, or a teaspoonful of sweet oil, which acts well on the bowels. A spice plaster is also of service in these cases. This consists in a heaping tablespoonful of powdered cinnamon, one of powdered allspice and one of powdered nutmeg; to these is added one teaspoonful of black pepper. These dry powders are stirred together upon a plate; a handkerchief is then spread upon a table, and upon this the spice is laid. Then another handkerchief is laid upon this, and the two are basted together without removing them from the table. Stitches are then taken diagonally across the two handkerchiefs, that is, they are quilted, which prevents the spice from falling to one place. Then while still upon the plate warm vinegar or brandy is trickled upon the upper cloth. The brandy may go through and wet the under handkerchief, but this is not advisable. This is then laid over the child's belly from the pubes to the ribs. The child may writhe a little at first,

but generally it will like the plaster, which is comfortable and warm. This can be left on from twenty-four to thirty-six hours. When removed it forms generally a perfect mold of the stomach, and is quite dry. The lumps may be broken up, again moistened and again applied. The pepper is a counter-irritant, the nutmeg and cinnamon are sedatives and the aromatic oils are absorbed to some degree and prevent griping. Should the child pass beyond our control while using calomel we should then administer astringents with care.

### COMMUNICATIONS.

#### MALARIAL FEVER, WITH INTENSE LIVER INVOLVEMENT.

BY ENOS T. BLACKWELL, M. D.,

CEDARVILLE, N. J.

It is much to be wished that the terms applied to diseases or aberrations from health might more nearly express the pathological changes connected therewith. In many cases this is impossible, from the limitation of our knowledge respecting the origin and nature of the inflection. Many efforts have been made towards amendment in this particular, with only partial success. The malady to which I devote this paper has been named bilious fever, remittent fever, malarial fever, pernicious fever, etc. None of these terms appropriately expresses our notion of the fever, judged by its best known phases, much less if judged by its exceptional forms. We must be content, therefore, for the present, to accept, to some extent, the nomenclature in vogue. I do not purpose to speak of the origin of our autumnal fevers; for that is not yet positively established, and I have nothing to offer beyond the accepted theories. My design is to describe, as far as I am able, a very interesting and dangerous case that came under my consideration at a very critical period in its career.

Mrs. H., about fifty years old, is the wife of a dairy farmer, residing in a valley which formerly was much infected with malaria. She has an hepatic trouble of many years standing, and had complained for three months, especially, of pain in the right hypochondrium, which became so severe at times, and especially on lying down, that

she was compelled to grasp the side with the hand, in order to limit the movement of the ribs, and so to diminish the suffering. She was unable to lie upon the side, and her bowels were greatly constipated. She is a woman of great vigor and activity in her household affairs, in prosecution of which, at the end of a most wearisome day's labor which involved severe lifting, she suddenly fell sick, and so remained for three or four weeks before I was called to assist in her treatment. I submit her own report of the salient points in her case, which is fuller than any I received; and has the marks of accuracy. It bears date November 27, 1889, and is the first fruits of her convalescence.

"I was taken with a chill, which lasted about two hours and was succeeded by a high fever; the temperature attaining 105° F. For three succeeding days I had chill and fever in alternate paroxysms, of about the same length, to the number of seven. During the chill I was extremely sick at the stomach. When the fever came on, I ached all over and could not rest. This weariness began as soon as I was taken sick; but, as I grew worse it increased. During the next four days I had no chill, but I constantly grew weaker. I had no appetite and slept but little. The pain and tenderness were great from the beginning; and increased as the days wore on. On the tenth day I had a chill and grew worse very fast. The headache and pain in both sides increased, and the sickness also. I was very thirsty, and swallowed a great deal of cracked ice, but no food. I was stimulated with alcohol, taking a teaspoonful of brandy once an hour, if I was able. Sometimes the intervals were longer. I never vomited very much at a time. The vomited matter was frothy and greenish; occasionally, there was in it a little blood. It was very bitter. The sick feeling that I had was terrible. I felt as if my stomach was throbbing, or turning over. I could lie only on my back; and no change could be made in my position, except as I was lifted. The weariness was very great—more than I can express. The burning in the stomach commenced after I had taken so much brandy. Then wine was tried. Whatever entered the stomach irritated it. Diarrhoea commenced about the sixteenth day, the stools being dark and resembling tar. It lasted a week, and then I became very costive."

On September 27, 1889, I first saw this



patient. She was profoundly weak, and could have her head raised only momentarily to facilitate swallowing. She lay altogether upon her back, and her voice was faint and weak. Her pulse was exceedingly small and feeble, and beating 90 times per minute. Her breath was mawkish and fetid. Her tongue was very foul, except just at the tip. She complained of nausea and extreme burning in the epigastrium. The alvine discharges were bronze-colored and very offensive. There was extreme tenderness beneath the free edge of the ribs. The liver boundaries could be traced very accurately in the right and left hypochondrium, and across the epigastrium, by the tenderness alone. The lower boundary of the painful area stopped abruptly with the verge of the liver, and did not at all involve the stomach. The disturbance of that viscus was purely functional and sympathetic. Through the attendants I learned that, when the disease broke out afresh in the second week, it was with extreme violence, the pain being exceedingly acute, and the vomiting severe and long continued. Collapse occurred during one of the paroxysms; and she lay as one dead. Partial recovery followed, and life continued with great weakness and extreme nausea and distress. The attending physician at first termed the disease "Malaria"—a cause for an effect. As the symptoms increased in gravity, it was named "Pernicious Fever." The consultant, who was called a few days before me, called it "Gastric Fever," a term which the attending physician interpreted as inflammation of the stomach, or gastritis.

The treatment in the early days of the disorder was sulphate of quinine in large and progressively enlarging doses; the extreme being eight grains every two hours; or ninety-six grains in a day. Mustard had been perseveringly applied across the suffering part, followed by a blister a few inches square to the right hypochondrium. To appease the intense stomach disturbance, chloroform and bismuth subnitrate had been administered. As an alternative—and, I suppose as generally useful—calomel was given; and as a diffusible stimulant, brandy, some drug being imposed on the unhappy stomach, every fifteen minutes. The stomach was the great object of attack, as this was believed to be the rock of offense. By the advice of the first consultant, the mercurial, which had been used perseveringly,

and in great quantity, was omitted, and nitro-muriatic acid was substituted. The other medicaments were continued. The change was for the worse, rather than the better; the ejections becoming intensely sour, the epigastric heat aggravated and the nausea intensified.

It was now evident that the treatment was unsuited to the pathological condition, and must be changed to insure success. My advice was in line with my diagnosis. Because of the presence and precedence of the hepatitis, and the absence of tenderness over the stomach, I judged that the liver was mostly in fault; that the disease was emphatically a bilious fever, so called, and that the treatment should be directed especially towards this, the point first affected.

In deference to my age and experience, as well as to my relation to the patient, the attending physician, under protest, permitted the following treatment, all else being omitted.

R Potassii iodidi . . . . . ʒj  
Potassii bicarb. . . . . ʒss  
Aque . . . . . f ʒ iss

M. Sig. A teaspoonful, in water as hot as can be drank, every four hours.

R Acetanelid  
Cinchonidiz sulph. . . . . aa ʒss  
Pulv. opii . . . . . gr. ij

Mix, and make fifteen pills, one to be taken every four hours, alternately with the preceding.

My *confrère* apprehended grave results from the action of the liquid mixture, and waived all responsibility for the consequences. This was at 9 o'clock A. M. There was little change in the symptoms during the forenoon; the burning in the stomach, the sourness and bitterness in the mouth, and the pain continuing much as before.

During the afternoon and evening there occurred three or four greenish-black stools. At bedtime, to relieve the pain and to procure sleep, one-quarter grain of acetate of morphia was given; the other prescriptions to be persevered with.

September 28, at 9 A. M., the patient's stomach was more comfortable; she had had two movements of the bowels during the night, of the same character as before, but had rested well. The pulse ranged from 90 to 100. The saliva was disagreeable and bitter; but she was able to take some prepared gelatine and beef-tea. Dr.— saw

her alone. He was agreeably surprised at the success of the treatment, and ordered its continuance. On September 29, the patient rested well, without anodyne. She had some relish for food, taking for the first time some cerealine. Her pulse was 84, and was quite full and of good force. September 30, she had rested well. Her pulse was 80, and of good strength. There had been two more movements—not so dark, but apparently full of globules of bile. October 1, her pulse continued satisfactory; and her voice had been gaining strength for two or three days. She could yet have her head only slightly raised while taking medicine or food, which were continued without change. The bowels were moving two or three times daily, with considerable pain.

At this time I ceased to see the patient; but she gradually improved, and was able near the end of November to write me an account of her experiences. She did not become fully convalescent until late in winter, or the beginning of spring.

The mistake in attributing the intense epigastric distress in this case to inflammation of the stomach, and the attempt to relieve it by medicines acting directly upon its mucous membrane, vitiated much of the early treatment, many of the drugs increasing the irritation and retarding recovery. This mischance clearly arose from the failure to recognize and appreciate the tissue or organ positively at fault. This could be easily accomplished with care, as the differential boundaries of the liver and stomach could be accurately mapped out by using the proper physical tests. The impropriety of such "whips" as brandy and chloroform, and their injurious influence, was amply shown by the subsidence of the stomach irritation, and the regulation and strengthening of the pulse which followed their withdrawal. The change for the better succeeded immediately the change of treatment, and is attributable to the subsidence of the hyperemia of the portal vessels, through the influence of the iodide of potassium, the potations of hot water, and the withdrawal of irritants and stimulants.

Castor oil has been found adulterated with resin. If shaken with nitric acid the adulterated oil becomes deep brown, and the acid layer assumes a yellow color. With pure castor oil the acid remains unchanged, while the oil assumes a light brown color.

## WAS IT RELAPSING FEVER?<sup>1</sup>

BY A. D. BARR, M. D.,

CALAMINE, ARKANSAS.

The following is the description of a continued form of fever that came under my observation in the latter part of 1888. At first I thought it to be malaria, and treated it accordingly; but I soon found that antiperiodics had no influence over the disease. I then abandoned all treatment, except to modify the symptoms when they were dangerous. When the fever exceeded 103° F., an antipyretic was given; and this was always acetanilid or quinine. When the nausea and vomiting were prominent some form of opium was used. During the first intervals nux vomica, arsenic and quinine were administered to prevent a return of the paroxysms, but without success. The natural course of the disease was carefully studied, uninfluenced by treatment, and the symptoms noted at the time furnish the data of this article. It was a self-limited, continued form of fever, the distinctive feature of which was three or more relapses. The recurrence of fever, as before stated, was the distinctive feature. Abruptness of invasion was characteristic of the disease. There was no prodromal or incubative stage. The seizures were never ushered in by a distinct chill; though chilly sensations were complained of, followed by a rise of temperature, usually sufficient to cause the patient to take to bed at once, though it sometimes required one, two, or even three days for the temperature to become sufficiently elevated to produce such a result. Perspiration seldom occurred until the fever began to decline. The fever attained quickly to considerable intensity, often reaching 103° or 104° F., within twenty-four hours. In one case the fever reached 104½° F. on the evening of the first day. This was, however, a relapse, instead of the primary attack. During the paroxysms the temperature denoted a persistent intensity of fever, ranging from 100° to 105° F. There were no oscillations; the temperature either gradually or rapidly reached its maximum, and then it maintained about the same elevation for from one to four days and sometimes longer, and usually subsided gradually. The duration of the

<sup>1</sup> Read at the sixteenth Annual Meeting of the Mississippi Valley Medical Association, October, 1890.

primary attack varied from six to twelve days.

During the intermission, the absence of fever and all other symptoms was complete. The period of intermission varied from two to twelve days, the average being about seven. The relapse, like the primary attack, was sudden, and was also generally ushered in by chilly sensations, though the first symptom was sometimes an elevation of temperature. The fever in the relapses suddenly became more or less elevated, usually more elevated than in the primary stage. The relapses also generally subsided gradually, and with moderate perspiration. Their duration was from four to ten days, and the greatest number was five.

Of symptoms referable to the digestive system, nausea and vomiting occurred often enough to be somewhat characteristic. They were generally prominent features, but they were not always present. They were frequently so severe that the patient was in danger of sinking from exhaustion or collapse. The vomited matter generally contained bile, and not infrequently blood. The tongue was generally coated with a white fur, but sometimes became dry and cracked. Diarrhoea was very infrequent. Constipation was the rule. Tenderness over the epigastric and iliac regions occurred to a very moderate degree. The appetite was often impaired, but not to the extent that is usual in most diseases where the temperature is elevated to as high a degree as it was in this case. Sometimes there was a noticeable craving for food, so much so that it was highly distinctive. During the paroxysms, pain in the muscles of the small of the back and the calves of the legs were complained of. They were never entirely wanting, though they varied in intensity.

The perceptions were not blunted in this as in various other diseases. Delirium was present sometimes; but it was of that character which is likely to occur when there is a high febrile movement, without regard to the existing malady. The face was usually flushed. The amount of urine was usually decreased. The decrease in one instance amounted to complete suppression for twenty-four hours; and the kidneys acted badly for several days thereafter; which in turn was followed by an excessive diuresis. A copious flow was apt to occur about the cessation of each seizure.

Regarding the cause of the disease, I am unable to give any satisfactory statement.

In one case it seemed probable that it was contracted by contagion, as the child was in frequent contact with a young woman suffering with the same disease. The disease seemed at times to be developed spontaneously.

In regard to treatment, all that I could do was to modify the symptoms. The disease was essentially a self-limited one, and was uninfluenced by all treatment instituted by me. Quinine, given in five or ten grain doses, from two to six hours apart, seemed to aggravate the condition by increasing the nausea and vomiting. Calomel also seemed to retard convalescence. The nausea and vomiting were best controlled by morphine and Listerine. In the first stage the pains were often so severe as to call for an anodyne; but as a rule when the temperature was reduced below 100° F., they subsided until the fever again became intense enough to call for a repetition of the antipyretic. Good, plain, wholesome food was allowed.

---

## SOCIETY REPORTS.

---

### SUPRA-PUBIC CYSTOTOMY.

---

DISCUSSION AT THE SOUTHERN SURGICAL  
AND GYNECOLOGICAL ASSOCIATION,  
NOVEMBER 12, 1890.

---

In discussing the paper of Dr. Cobb (see p. 7).

DR. G. FRANK LYDSTON, of Chicago, said we must necessarily consider the question which, as I infer from the title of his paper, Dr. McGuire would have discussed if he were here, the best route to the male bladder in cases of calculus, and more particularly of prostatic disease.

The revival of the old supra-pubic operation, which had so long fallen into disuse, has, under antiseptic methods, resulted, in my opinion, in a little too much enthusiasm regarding its merits. I think we must be guided by the same wise conservatism that has been suggested here this morning relative to the question of removal of the diseased appendages in the female. I believe that a proper selection of cases is necessary. I do not believe that every case of prostatic disease, of calculus or of enlarged prostate, justifies the performance of the supra-pubic operation to the exclusion of everything else.



There seems to be a tendency in the direction of routinism in this respect. When a calculus is present in connection with an enlarged prostate, and the prostate is very large, particularly if it be suspected that there is hypertrophy, especially some form of hypertrophy in which a distinct tumor is present, or in cases in which the bladder is profoundly involved, it is undoubtedly best to perform the supra-pubic operation. In this way we avoid certain dangers which in severe inflammatory conditions of the bladder are incurred by the performance of the perineal section. One of these is the extreme danger when the bladder is in a condition of chronic inflammation and the urine is strongly septic, and of septic absorption from the perineal wound. There is no question but that the perineal wound is dangerous in this respect, and far more so than a wound inflicted by the supra-pubic operation. The facilities for absorption are greater, and the tract over which the urine is allowed to flow is more important. It is desirable to avoid this absorption, and in cases of extreme bladder disease in which the urine is highly septic the supra-pubic operation is the best.

Another consideration—and it is one of the principal dangers we have to contend with in operations upon the male urinary apparatus—is shock. It is not only injurious *per se*, but indirectly, by reflexly suppressing the function of the kidneys. The shock in supra-pubic section is much less than in the perineal operation. Where this consideration is of importance, it is undoubtedly better to perform the supra-pubic section. If there is a large stone, or if there is any portion of the prostate that is susceptible to surgical measures, the opening of the bladder from above of course facilitates matters. It is a difficult thing to accomplish removal of a portion of the prostate through a perineal wound. Some surgeons have reported extraordinary cases which have been operated on by electrolysis and by the galvano-cautery. I would rather see the operations than read of them. I would have to see them performed in order to be convinced of their utility. Briefly, then, in cases in which the urine is highly septic, in the cases in which the kidneys are disturbed, in cases in which it is desirable to avoid shock, and in cases where operation on the prostate is contemplated—*i. e.*, where the removal of any portion of the prostate is deemed advisable, the supra-pubic operation is undoubtedly

the best. When a calculus is small, provided that we decide upon a cutting operation rather than upon litholopaxy with the bladder in good condition, and when the prostate is not extremely large, if any operation be done in the way of exploration of the bladder, the perineal operation should be preferred. Danger is avoided by the procedure of Reginald Harrison, which consists of the introduction of a rubber tube into the bladder, thus avoiding contact of the septic urine with the tissues; this is a modification of Cock's operation.

When symptoms of serious systemic poisoning exist, the supra-pubic operation should be selected. I mean by this, not symptoms of uræmia so-called, but that peculiar toxæmic state incidental to the absorption of ptomaines, which characterizes many chronic diseases of the urinary organs. This systematic poisoning is noticed in a minor degree even in some cases of relatively slight strictures. I do not think that the supra-pubic operation is any better from the standpoint of drainage than the perineal operation, but where drainage is to be prolonged it is much more convenient in this situation. Again, absorption, as I have already remarked, during the removal of the septic material by washing of the bladder and during the spontaneous draining away of the urine, is not nearly so apt to occur as when the operation is done in the perineum.

In perineal operations, after the danger of shock has passed away, there is danger of septic infection in direct proportion to the frequency with which the urine is allowed to come in contact with the wound. The same is true of internal cutting operations in stricture. It will be found in many cases that the patient will be pretty comfortable until the first time he urinates, when immediately a chill followed by fever is set up, and very often goes on to a fatal issue, with all of the symptoms of profound septic poisoning. The tract of the wound in the supra-pubic operation is not so long, relatively speaking; it does not traverse such important structures, nor are these parts so well endowed with sensitive nerves and absorbents as is the case with perineal wounds.

DR. JOHN D. S. DAVIS, of Birmingham, Ala., said: I cannot accept the statement that the perineal incision is the best for draining the bladder when we have no enlarged prostate. I have done Reginald Harrison's operation a number of times. I have observed

the results of the perineal incision many times, and in no case have I got as good results as by supra-pubic operation for draining the bladder *per se*, from the simple fact that the tendency of the perineal incision is to close before the pathological conditions in the bladder subside, while with the high operation it does not close so readily. I do not think the high operation is the ideal one for the relief of stone. I think the bilateral incision (perineal) is the best, that is, in cases where you have no enlarged prostate. It is best for the removal of the stone where you want no after drainage. Where you want after drainage, my experience as well as that of Dr. McGuire and other surgeons, proves conclusively, and beyond any possible doubt, that the high operation is the best.

I have a criticism to offer regarding the technique of the operation. I do not agree with Dr. McGuire in regard to making his coffee spout fistula. He discarded it over a year ago, and now follows my technique. I have three methods for making the fistula:

1. When the distension is great and no intra-vesical operation is necessary, the opening is made with a trocar, withdrawing the stylet and replacing it with a rubber catheter, after the introduction of which the canula is withdrawn, leaving the catheter in the bladder. It is necessary sometimes to enlarge the external or cutaneous opening to prevent a closure of the catheter by compression, and to render the external opening sufficiently large.

2. The bladder may be opened, when distended, by a direct incision with the knife, in the median line, with cutting edge towards the symphysis pubis at an angle of forty-five degrees. The knife is withdrawn and a catheter is introduced through the wound into the bladder.

3. A perpendicular incision, one or two inches, is made in the median line above the symphysis pubis. If the pyramidalis muscles are in the way the fibre should be cut. The transversalis fascia is divided on a grooved director from symphysis to upper margin of superficial wound. Instead of following Guyon's manoeuvre I catch the bladder with a tenaculum on a line with the symphysis, through the pre-vesical fat, and cut with a bladder knife into the bladder with one smooth, clean incision, to prevent undue disturbance of the celluloadipose tissue between the bladder and pubes, and avoid infiltration. I have never seen a case

where it was necessary to push up the pre-vesical fat, and with it the peritoneal cul-de-sac. If the bladder is caught on a line with the symphysis and cut downward, no fears need be had for the peritoneum. Cutting this pre-vesical fat prevents its after dropping down over the opening into the bladder, and acting as a valve to prevent easy access to bladder, escape of urine, and causing infiltration.

I agree with Dr. Lydston that the shock is much greater in the perineal operation, but this operation is the ideal one in my judgment for the removal of stone, where no after drainage is required; but where we desire after drainage the high operation is the better.

The fistula is made competent by a pseudo-sphincter formed by the fibres of the detrusor urinæ muscle. In all my cases there is the power to retain and expel the urine at will regardless of the position of the body.

DR. JOSEPH PRICE, of Philadelphia, said: Some of the gentlemen differ in method from the distinguished gentleman that devised this operation, and surely they deserve credit for perfecting it. Dr. McGuire, I believe, has rejected all perineal operations for the removal of stone, and he looks upon this as the most perfect of all methods of dealing with vesical troubles, whether disease or calculus. He has now so completely perfected the operation that he tells me he has a number of men traveling about passing their urine at intervals of every four or six hours at ease, having perfect control of both the bladder and its contents, passing the urine in a stream and suffering no inconvenience from the new channel for voiding their urine. He expresses his regrets that he has done so many perineal sections for stone.

What Dr. Davis has said in regard to drainage I concur in. You can drain anything above the pubes and drain it successfully. It is curious to note the results of the two schools, one advocating vaginal drainage, and the other supra-pubic, the first following the methods of Martin and others of puncturing the vaginal wall and draining from the vagina, and the second that of drainage from above. The results are that Martin lost by vaginal drainage fourteen in 77 cases of pelvic operations, a mortality that should stay our hands in such work.

DR. W. E. B. DAVIS, of Birmingham, Alabama, said: I would not detract any of the honor of this operation from Dr. McGuire.

Dr. McGuire is a great surgeon and has done good work in this direction. I believe with him that this is the ideal operation for stone or for cystitis. The reports of the histories of Dr. McGuire's cases are not satisfactory. We can get but little idea of the after treatment. My brother (Dr. John D. S. Davis) has operated on more cases than any other man in the South except Dr. McGuire, and we have had an opportunity of following these cases, and have found that it is a good deal of trouble to keep the fistula open. Every two or three weeks patients will come to you complaining of some trouble in the fistula. I have seen abscesses form in some cases. Dr. McGuire, you remember, when he first devised the operation, suggested sewing up the lower part of the wound, making a coffee-spout fistula, allowing the urine to come out at the top of the wound. My brother followed Dr. McGuire in the case of a man with cystitis. He tried to keep the fistula open; but an abscess formed at the lower angle of the wound. I insisted upon removing the tube from where it was and placing it in the bladder through the opening made by the abscess, but he said he was going to follow Dr. McGuire's technique. However, the urine did come through the abscess opening and proved the best operation to be *direct supra-pubic cystotomy*. My brother was the first, I think, to read a paper on this subject.

Dr. McGuire deserves a great deal of credit for the operation, but for the technique of the operation, the credit should be given where it belongs. We have done the direct incision a number of times. It is the ideal operation. We do not want to make a long canal. It is not a lengthy canal that controls the urine. There is no question but what patients will pass their urine voluntarily through the direct fistula just as they do through the natural passage.

The trouble is that these cases, where we resort to supra-pubic cystotomy for drainage in prostatic troubles, come to us too late. This is well illustrated in the case of an ex-vice-president of this Association, Dr. R. D. Webb, a man who has written most valuable papers on this subject, advising early operation. Dr. Webb, however, neglected his own case until he was almost dead. He had been unable to pass urine except through a catheter for a great many years, and for the past six months he had been compelled to draw it off frequently. He was having severe paroxysms of pain

constantly. While he has been greatly relieved by the operation, which I performed more than two months ago, I doubt whether he will be able to go about his work again. He waited too long. The prostate was enormously enlarged, and when we came to do the operation we had great difficulty in finding the bladder, which would hold only two or three ounces of urine. We would insist on early operation in prostatic cases.

DR. GEO. A. BAXTER, of Chattanooga, Tenn., stated that one of his recent cases was such an apt illustration of some of the points made in reference to supra-pubic drainage and the danger from septic infection by drainage though the perineum that he felt compelled to make a report of it.

The subject, a former doctor of medicine, between 70 and 80 years of age, suffered severely from enlarged prostate, and was in the habit of relieving himself of occasional attacks of retention by using the catheter himself. During a visit to some mountain springs, thirty miles distant from Chattanooga, he suffered one of these attacks of retention, but failed to enter the bladder. A neighboring physician was called in and failed also, and he was sent post haste to me. He reached town in the night, and called temporarily a very competent physician, who found him over a vessel with a long silver catheter pushed up to the hilt, but not in the bladder, and examination disclosed the fact that this had been done frequently, so that it was impossible to tell where the real canal was, so ruptured and torn was the whole urethra. I saw him early the next morning, and with the doctor last in attendance determined upon aspiration rather than further trial to enter the bladder by the natural passages, or by perineal operation, after first confirming the condition as reported to me, for the following reasons:

1. The bladder was immediately distended and had been so for forty-eight hours, hard as a rock and seemingly likely to burst at any moment, rendering immediate relief imperative.

2. I thought and still hold that a route through the perineum or the urethra simply would have necessarily produced infiltration, sepsis and death.

The man was unconscious by this time with stertorous breathing, weak, fast pulse. I aspirated, but had to turn the needle a little to the left side before the bladder was entered. I followed the immediate supra-pubic cystotomy for the purpose of complete drain-



age in order to protect the parts lacerated by himself, put in a large double tube and washed the bladder out with boric acid. That I was right was evidenced by his condition, and he died either as the result of uremia, from which he was suffering when I operated, and from which he was only partially relieved, or from exhaustion of his long continued suffering and generally prostrated condition, I do not know which, but it matters little, as the case is here related for the illustration of points in other directions made by the gentlemen discussing this subject.

DR. F. W. McRAE, of Atlanta, Ga., said: With regard to the termination of some of these cases, I desire to exemplify the statement which Dr. W. E. B. Davis has made. The operation is frequently delayed too long to be of benefit to the patient.

I operated on a man, aged 72 years, last summer, who had been suffering for five or six years from supposed prostatic disease. He had been under my care but a short time, when an attack of cystitis occurred. I examined him for stone and was unable to find it. I finally decided to do the suprapubic operation with drainage, and after cutting down and opening the bladder I found a stone embedded underneath the prostate, which I removed. This patient—I will say by way of parenthesis—had in the last five years two strokes of hemiplegia. He had been paralyzed on one side twice and was not in the best physical condition for the operation. I did the operation as suggested by Dr. Davis. The case progressed nicely until the fifth day, when the patient suddenly died. I didn't have a chance to make an autopsy; but the presumption was that he died from some cerebral trouble. The wound was opened, which I found had perfectly healed, except opening left for drainage-tube, and there was no apparent suppression of urine.

DR. W. H. H. COBB, of Goldsboro, N. C., said: Some of the interesting points in my paper have not been touched upon in the discussion. First, the patient's age. Being only 49 years old, he was rather young for enlarged prostate. Then the etiology—what was the cause of prostatic enlargement in this patient? Could it be attributed in part to his rheumatic diathesis? And is it not unusual to find so many symptoms simulating vesical calculus? the patient having, in addition to his terrible cystitis, the sudden arrest of urine, which was relieved by change of pos-

ture, with great pain in the glans penis. The symptoms were so urgent that the operation was performed simply to save the patient's life. Had the case been allowed to progress much longer, the inflammation would have traveled up the ureters to the kidneys, and the operation would have proved useless.

## PERISCOPE.

### Hepatic Colic.

In a recent number of *La Médecine Moderne*, Professor Germain Sée discusses the always interesting and important subject of the treatment of hepatic colic. The obvious primary indication is to promote the expulsion of the gall-stone, and this, Professor Sée urges, should be accomplished by remedies which increase the flow of bile. The sufferings of the patient are, however, usually so intense that we are compelled to consider first the application of measures directed to the relief of pain. Of these by far the most speedy and effectual is the hypodermic injection of morphine. This usually acts very well, but Professor Sée warns us that in some cases the patients, after a fit of vomiting, fall into a state of alarming collapse, even when only one centigramme of morphine has been injected. We must also bear in mind that morphine is one of the substances which diminish the biliary secretion. Of antipyrin Professor Sée says that "it will only render mediocre services in this matter, and that we should not lose time by prescribing it." Chloral and chloroform have a less certain action than morphine, but possess the advantage of not hindering the secretion of bile. Professor Sée advises that chloral, if used at all, should be given by enema, as it will not be well tolerated by the stomach. He is disposed to believe that both chloral and chloroform may act favorably by relieving spasm and promoting the relaxation of the walls of the bile-duct.

The second and most scientific indication is to increase the biliary secretion. The mere presence of the gall-stone and the irritation which it excites, have a tendency to augment the flow of bile, but help may be obtained from the use of various medicinal remedies. Of cholagogues Professor Sée enumerates bile itself, turpentine and its derivatives, terpine, terpinol, benzoic acid,

salicylate of soda, and olive oil. He points out that bile is inadmissible, as its employment tends to make the biliary secretion thicker rather than to render it more fluid, as is desirable. Turpentine and its derivatives are comparatively inefficient cholagogues, but are nevertheless of some value. The "Durande remedy" owed its success to the presence of turpentine. Of two only of the remedies enumerated does Professor Sée hold a high opinion—viz., salicylate of soda and olive oil. The cholagogue action of the former of those, although pointed out by Rutherford, is hardly sufficiently recognized in this country. It seems to increase the entire biliary secretion, but more particularly its fluid elements. According to Professor Sée, it not only acts as a cholagogue, but has also an analgesic effect, which is obviously desirable in the conditions under consideration. It is advised that salicylate of soda be given with large quantities of fluid, as this seems to assist its action.

The cholagogue action of olive oil has been a subject of dispute, and was denied by Bidder and Schmidt. The later experiments of Rosenberg, however, seem to show that if the animal experimented upon be kept upon a normal diet, and olive oil be administered, "a considerable augmentation of the biliary secretion, especially of its fluid part, begins in from thirty to forty-five minutes, the maximum increase is obtained from the third to the fifth hour, and there is also a considerable increase of fatty acids which are capable of dissolving cholestearine." Professor Sée believes that clinical experience proves that the administration of olive oil both promotes the removal of the gall-stone and relieves the attendant pain and jaundice. Its *modus operandi* has been the subject of some fanciful theories. Thus it was at one time supposed that the oil actually ascended the duct and acted locally upon the impacted gall-stone. For this idea there was never any adequate foundation, and it must suffice to say that the administration of olive oil tends to increase the flow of bile and to make it more liquid. The chief objection to this line of treatment is that the oil is often badly tolerated, and that even if it be well borne at first, intolerance is quickly excited.

Professor Sée finally discusses the remedies that are contra-indicated in an attack of biliary colic. Chief among these are those medicaments which tend to excite strong peristaltic movements of the intestine, as

these are apt to be propagated to the bile passages. Hence strong purgatives are injurious. Purgation should only be employed after the crisis is over, and even then with caution, as it may excite a fresh attack. Nevertheless, it cannot be wholly dispensed with, as it is desirable to clear out the bile that has found its way into the intestine. We should also avoid those substances which diminish the biliary secretion, of which Professor Sée enumerates the salts of potash, calomel, iron, copper, morphine, atropine and strychnine.

These recommendations—coming from so esteemed a source, and founded upon such ample physiological experiment and clinical trial—will be received with the respect which they deserve. Probably the point which runs most counter to ordinary practice is the advice given regarding the use of purgatives. At the crisis of the malady, when the duct is contracting violently and the patient is in extreme agony, no one would dream of giving a purge; but a little later on, when the pain has been subdued, while the impaction remains and jaundice is deepening, moderate purgation with such an agent as Glauber's salt has often proved the most efficient of all methods of treatment. Turpentine does not seem to have justified the hopes that, on theoretical grounds, were raised regarding its value in biliary colic. Salicylate of soda and olive oil are well worth a trial, and Professor Sée's recommendation will ensure their wide employment. Whatever medicinal remedies we select, it seems evident that copious draughts of warm water, to which a little soda has been added, are invariably advantageous, and it is well that so simple a measure should not be overlooked or neglected because of its simplicity.—*Lancet*, December 13, 1890.

#### Grafting Skin from the Dead Body.

The *Annals of Surgery*, November, 1890, says that in 1888, Drs. Bertens and Werner described a remarkable case of a boy, with intractable extensive ulcers of the legs, in which they had successfully transplanted 24 skin grafts excised from the body of a woman 75 years old about twenty minutes after her death. The perusal of this paper induced Dr. Sophia Ivanova, of St. Petersburg, to try their method in the case of a poorly-nourished woman, æt. 75 years, who had received a burn of the third degree involving the

whole leg and dorsal aspect of the foot. In about a fortnight the injured integuments sloughed away to leave an enormous freely suppurating granulating surface. The grafting, resorted to shortly after the separation of the sloughs, was made at two sittings, with an interval of three and one-half weeks, the material being derived from two new born infants' bodies, one and one-half and two hours after the children's death. During the short period elapsing between the excision and transplantation; the strips and pieces were kept in a 6:1,000 solution of chloride of sodium at 40° C. Every one of them became firmly adherent to the surface in 48 hours, while in two or three days the epidermis began to grow around all the grafts. Speedy and sound healing ensued. Dr. Ivanova believes that this method offers undoubted advantages over Reverdin's plan, in securing more rapid healing of lesions and lessening the injurious effects of prolonged suppuration and lying in bed; it gives better functional results, through preventing cicatricial contraction; the material is easily obtainable in abundance, and that without inflicting suffering or inconvenience to any human being.

The skin must always be taken from bodies of patients who have not had syphilis, septicemia or any other infectious disease. The best material is afforded by bodies of new born infants of healthy mothers, the infantile tissue possessing most energetic vitality.

It is advisable to employ rather long strips, measuring not more than an inch or so in width. Small sized pieces are easily washed away by pus or blood. Only the skin proper, freed from all subcutaneous cellular tissue, should be transplanted. If the granulating surface is clean and not very weak, no scraping is necessary. It is sufficient to previously thoroughly wash the surface, after which the grafts should be carefully adjusted and slightly pressed down with dressing.

The best dressing material is gauze soaked in a boric acid solution, and then wrung out. This tissue absorbs secretions very well, never becomes adherent to grafts, and hence may be easily removed without disturbing the latter.

The transplantation must be practiced as early as possible; thus in cases of deep burns, it should be resorted to immediately after the separation of sloughs. When large-sized strips or pieces are used, even a free suppuration cannot prevent their adhering to the surface.

### Liquid Pepsins.

The *Chemist and Druggist*, October 18, 1890, says Mr. D. L. Haigh has been abusing liquid pepsins before the Missouri Pharmaceutical Association. Amongst the things he said, and which will have occurred to many pharmacists, was that among the simple solutions of pepsin which are objectionable are the wine, elixir, aromatic elixir and elixir of pepsin and bismuth. In the last preparation the ammonio-citrate of bismuth is used. To hold this in solution it must be either slightly alkaline or neutral. Pepsin, on the other hand, must be in acid solution or it will decompose and very likely precipitate. The two substances are therefore incompatible, and the preparation is almost worthless. This is a very simple case. How is it with an alkaloid added, as in elixir pepsin, bismuth and strychnia? It is known that alkaloids must either be held in solution by means of a solvent—generally alcohol—or be converted into soluble salts by an acid. This last preparation, then, must be neutral to be stable. How long can this be the case with such a loosely-constructed salt as ammonio-citrate of bismuth, when the ammonia is being constantly carried off? The popularity of pepsin has carried its use to the extreme; although it is an invaluable remedy, like many good things it is abused. The only way to administer pepsin is in the solid form, preferably in powder. The vast number of scale pepsins are for the greater part peptones and do not possess the digestive power of the powdered pepsins. In fact, the highest digestive power pepsins are not soluble to any extent, which is another very potent reason why this article should not be used in liquid form.

There is truth in some of Mr. Haigh's statements, but he has not carried his inquiries far enough. Liquid pepsins can easily be made which possess high digestive power. For years we have pointed out that the minimum amount of alcohol should be used for the preservation of these preparations, as alcohol in certain amount precipitates the ferment. Mr. Haigh appears to overlook the fact that the pepsin ferment is a soluble body. We have no evidence that it is insoluble in alkaline media; the question is: Is it desirable to administer it in such media? We know that in that condition it is inactive, but how long will it remain alkaline in the stomach?

That there is great ignorance regarding



pepsin is evidenced by the fact that some time ago a medical journal, whose opinion is highly valued, stated that it had tested one of the pepsin preparations which Mr. Haigh objects to, and from the amount of starch which it converted, it had been led to form a high opinion, etc. The manufacturers actually advertise this testimonial!

### Peroxide of Hydrogen.

The *University Medical Magazine*, December, 1890, says editorially that peroxide of hydrogen is a drug which has been gradually and steadily gaining in favor, and which has yielded to each who has faithfully tried it results so constant and so satisfactory that he has learned to depend upon it. As ordinarily found in the shops, peroxide of hydrogen is a 3.2 per cent. solution, yielding fifteen times its bulk of oxygen. This solution is far more potent than is water charged with fifteen times its volume of oxygen, since in the peroxide preparations the gas is given off in its nascent state and is peculiarly powerful in its chemical affinities.

There is abundant evidence as to the value of the peroxide, from both the clinical and the experimental standpoint. The number of those who have reported excellent results from its use is very large, and to this must be added the testimony of the bacteriologists, who find in this drug a potent and almost immediate germicide. It is devoid of septic properties, its worst effect being, when used in a too concentrated form, to cause some local pain and irritation. It is applicable in all cases where pus is present, and where the discharge is foul and profuse its effect is admirable. In suppurating otitis media, in purulent conjunctivitis, the aurists and ophthalmologists have long prized it as one of their most valuable medicaments. In the sloughing inflammations following scarlet fever and diphtheria, the laryngologists place great confidence in its powers. Surgeons, however, in whose work it might prove generally valuable, have been somewhat slow to recognize its virtues. But its use in a great variety of sloughing and suppurating cases has given results better than those obtained from any other germicide—bichloride of mercury not excepted. Where the discharging area is represented by a surface of granulations, the drug can be applied by means of an atomizer. This enables

a small quantity to reach every portion of the infected surface. In the case of a suppurating fistula or cavity, the peroxide may be injected by means of a syringe. Immediately following its application to a purulent surface, an active effervescence goes on, and every particle of pus which it reaches is destroyed. Not only this, but the microbes, the active agents of pus formation, are also devitalized, so that a large surface can sometimes be rendered aseptic by one or two thorough applications. Even if this result is not reached, the discharge is greatly lessened, and it is by no means uncommon to see a case, in which the pus had amounted to drachms, so favorably affected that the dressings contain but a few drops of purulent matter.

The strength in which the fifteen volume solution is used will vary with individual cases. It can be employed without harm in full strength. Where this is painful, one, two or four parts of water may be added.

### Fatal Uremia in Persons Apparently Healthy.

The *New York Medical Journal*, November 15, 1890, says Dr. A. Westphal has described an interesting case, in the *Berliner klinische Wochenschrift*, of uremic coma resulting fatally in a person apparently in a fair state of health. A young man, twenty-four years old, a joiner, was admitted into the hospital with sudden symptoms of difficulty of breathing, palpitation, swelling of the feet and ankles, and left-sided headache. His history was that of a feeble childhood, but without any serious illness. His feet had never swelled before, there had been no difficulty with the urine, and he had always been able to attend to his heavy work. He had not been a drinker, had not had syphilis, and had not been a worker in lead, and there was no ascertainable heredity. His face was swollen, his ankles were œdematous, and he was manifestly anemic. The heart was hypertrophied somewhat, the sounds were weak but pure, with no accentuation of the pulmonary or aortic second sound. The pulse was small, regular and without distinct tension. The urine was clear, acid, of the specific gravity of 1.005, with some albumin, hyaline casts and leucocytes. There was nothing abnormal in the internal organs or the blood, but there was albuminuric retinitis. During the first few days of

his treatment at the hospital the subjective symptoms lightened up decidedly, and he expressed himself as feeling quite well and gave the impression of being not seriously ill. The albumin remained at a small amount, and the quantity of urine varied between forty-five and fifty-eight ounces *per diem*, with a specific gravity of from 1.003 to 1.006. Five days after his admission, aphasic symptoms made their appearance as the forerunner of a severe uremic attack, which set in with full force during the night; there were both clonic and tonic convulsions, frothing at the mouth and loss of consciousness. The temperature rose to 103.8° F., the respirations to 60 and the pulse to 160, the cardiac dulness being increased to the right. Death ensued in deep coma from pulmonary œdema. On autopsy, both kidneys were found to be contracted, the right one being somewhat peculiarly displaced, being depressed and lying opposite the fourth and fifth lumbar vertebræ; it was extremely small, not more than two inches long by less than an inch broad, and appeared as a grayish-red fibrous mass with the blood-vessels small and not thickened; from these facts, as well as the microscopic appearances, the condition was judged to be congenital. The case was remarkable as occurring in a young person, without previous uremic symptoms, who was apparently doing well when he fell into a state of profound coma and died in what was, so far as was known, his first seizure.

### The Treatment of Burns.

In the Friedrichshain Hospital in Berlin the following is the method of treatment of burns employed by Dr. Bardeleben.

The burned surface is first carefully washed with a two or three per cent. solution of carbolic acid or a three per mille solution of salicylic acid. The blisters are then opened, and the entire surface covered with subnitrate of bismuth finely powdered, and over this a layer of cotton-wool. This dressing is to be renewed as soon as it becomes at all moistened by discharges from the wound. If the burn is very extensive, an ointment of bismuth is substituted for the dry powder.

Dr. Bardeleben asserts that with this dressing cicatrization is much more rapid and suffering much more quickly relieved than is the case with any other form of treatment.

He states that, in spite of the large quantities of bismuth which he has employed, he has never seen any symptoms of poisoning follow its use.—*Therapeutic Gazette*, November, 1890.

### Dyspepsia of Children.

The *Annals of Gynecology*, November, 1890, says that according to Jules Simon, dyspepsia is sometimes the early manifestation of a neuropathic state in girls from 6 to 8 years old. The treatment he suggests is:

1. Tonic. General treatment, hydrotherapy, diet and regimen.
2. Sedative. Administer at each meal, well diluted, 3-5 drops of:

R Tr. belladonnæ.  
Tr. opii camphorat. . . . . aa f 3 ss. M.

After the meal prescribe a powder composed of:

Codeiæ . . . . . gr. 1-30 — gr. 1-15  
Magnesiæ  
Pulv. oculi cancrorum . . . . . aa gr. iss  
Pulv. rhei . . . . . gr. j  
Ext. nucis vomicæ . . . . . gr. 1-6 M.

3. As an eupeptic before meals administer one or two teaspoonfuls of the following, well diluted.

R Tr. cascariæ.  
Tr. nucis vomicæ . . . . . aa f 3 ij  
Tr. rhei . . . . . f 3 ss  
Tr. aurantii amar.  
Tr. gentian. . . . . aa f 3 j. M.

### Lantanine as Febrifuge.

The *Journal de Médecine*, October 12, 1890, speaks of an alkaloid extracted from the *Lantana Brasiliensis* or *Yerba sagrada*. It is described as a white body, in the form of a fine powder, bitter, presenting alkaloid reactions and forming salts with acids. It exerts a moderating action upon the circulation, like that of quinine, retarding nutrition and lowering temperature. It is employed in intermittent fevers and as an antipyretic. In intermittent fevers it should be administered immediately after a paroxysm. It often succeeds where quinine has failed. The dose is fifteen or thirty grains a day, in pills.

Jan, 10, 1891.

Editorial.

47

# THE MEDICAL AND SURGICAL REPORTER.

ISSUED EVERY SATURDAY.

CHARLES W. DULLES, M.D.,  
EDITOR AND PUBLISHER.

N. E. Cor. 13th and Walnut Streets,  
P. O. Box 843. Philadelphia, Pa.

## ADVICE TO SUBSCRIBERS:

See that your address-label gives the date to which your subscription is paid.

In requesting a change of address, give the old address as well as the new one.

If your REPORTER does not reach you promptly and regularly, notify the publisher *at once*, so that the cause may be discovered and corrected.

## ADVICE TO CONTRIBUTORS AND CORRESPONDENTS:

Write in ink.

Write on one side of paper only.

Write on paper of the size usually used for letters.

Make as few paragraphs as possible. Punctuate carefully.

Do not abbreviate or omit words like "the" and "a," or "an."

Make communications as short as possible.

NEVER ROLL A MANUSCRIPT! Try to get an envelope or wrapper which will fit it.

When it is desired to call our attention to something in a newspaper, mark the passage boldly with a colored pencil, and write on the wrapper "Marked copy." Unless this is done, newspapers are not looked at.

The Editor will be glad to get medical news, but it is important that brevity and actual interest shall characterize communications intended for publication.

## IMMIGRATION AND PUBLIC HEALTH.

The influence of the enormous immigration which yearly adds hundreds of thousands of human beings to the population of the United States deserves the most careful study of all who are interested in its moral and physical welfare. The economical relations of immigration get a fair share of attention from Congress; but moralists and physicians will have to take the matter up, if the relations spoken of above are to be wisely regulated.

Dr. Hamilton, Surgeon-General of the Marine Hospital Service, has been considering this subject and recommends more rigorous inspection and restriction of immigration.

He suggests that the law be amended so as to provide that hereafter any person intending to immigrate into the United States shall

produce to the United States Consul nearest him evidence that he has not been convicted of any crime; that he has not at any time been a public charge in the country where he lives, and that he has not at any time received public assistance. And, further, that he produce to the Consul a certificate from a legally qualified resident physician to the effect that he is at the time suffering from no contagious or chronic disease or disability such as would make him a public charge. This paper should also set forth whether the immigrant intends to become a naturalized citizen or merely a temporary inhabitant. These suggestions cover a good deal of ground, part of it being in the department of political economy. As physicians we are especially interested in the proposition to submit intending immigrants to a strict scrutiny as to their physical soundness, or at least their freedom from grave disease. Just now American experimenters with Koch's "lymph" find it hard to get a subject with lupus to operate upon, and it would be a good thing if the law made it impossible for our European friends to send any of their too numerous lupus afflicted countrymen here. So, it would be well to make leprosy or syphilis and some other diseases which need not be named, a bar to immigration. In this way a certain element of danger to our country would be eliminated from its development and a better chance would be afforded to eradicate certain diseases which have acquired a real, although as yet a slight foothold in this country.

We trust that Dr. Hamilton's suggestion will not be allowed to fall, but that he and the members of the profession generally will try to get it into such shape that Congress can and will act upon it.

## TRANSFUSION OF BLOOD AND SALT SOLUTION.

Dr. John Marshall, of the University of Pennsylvania, has published in the *Zeitschrift für Physiologische Chemie*, November 11, 1890, a very interesting article in regard



to the transfusion of a mixture of defibrinated blood and salt solution. After briefly indicating the present position of the question of the use of salt solution in transfusion, he gives an account of a number of experiments, in which he used a mixture of one part of defibrinated blood of the animal on which he had made the experiment, and nine parts of a 6 to 1,000 solution of chloride of sodium. The result of this method of transfusion was exceedingly satisfactory. The results were studied not only as to the general appearance of the animals, but also by careful investigations of the chemical and microscopical conditions of the blood after transfusion. A similar process could be carried out in the case of human beings, of course, using a mixture of human blood with a salt solution. Salt solutions alone are of a recognized value in preserving life after great loss of blood, but the addition of a certain proportion of blood containing living corpuscles, furnishes something besides the mere mechanical distension of the blood-vessels with an innocent circulating fluid, as is the case in transfusion of salt solution alone.

#### **PROPOSED MEDICAL EXAMINERS' BILL FOR PENNSYLVANIA.**

At a meeting of the State Medical Society at Pittsburgh, in June, 1890, a Committee on Medical Legislation, consisting of the Presidents of the different County Societies throughout the State, was appointed. This Committee met at Harrisburg, September 17, 1890, and, after consultation, appointed an Executive Committee of seven to draft a proper bill and present it to the meeting of the General Assembly in January.

The bill may not suit each individual member of our profession, but the Committee, after due deliberation, thinks it is the best that we can ask for at this time, and it appeals to the members of our profession in Pennsylvania to give it their support, and see to it that their individual influence is

used with their representatives for its passage.

The text of the proposed law will be found in another part of this issue of the REPORTER. We give it for the information of our readers, and hope it will secure their approval and support. Especially do we commend to their notice the intimation of the Committee that it may not exactly suit everybody, and urge that they avoid the risk of losing all by proposing unimportant changes over which disagreement might arise.

The REPORTER thinks this Bill would do much to protect the community, to raise the credit of the State and to elevate the standing of the profession, and will do what it can to secure its passage.

#### **INCORPORATION OF THE PENNSYLVANIA STATE MEDICAL SOCIETY.**

On December 20, 1890, the Medical Society of the State of Pennsylvania was incorporated by a decree of the Court of Common Pleas of Philadelphia. This is the outcome of a resolution adopted at the last meeting of the Society, by which a Committee was instructed to secure the incorporation of the Society. It is well that the members of the Society shall understand certain effects of this action. At the next meeting of the Society it will be necessary: 1. To adopt a set of By-Laws (which may be the old ones or any modification of them which may be desired); 2. To fix the date of the annual meeting for the election of Trustees; and, 3. To choose three Trustees to serve for one year, three to serve for two years and three to serve for three years. Each year thereafter three Trustees are to be chosen to take the place of those whose terms expire. The Trustees to act until the meeting of the Society are the members of the present Judicial Council.

The incorporators will be obliged to provide for the perpetuity of the membership by electing such other members as they may see fit—presumably all the present members

—and providing a method by which hereafter new members shall be chosen.

According to law, the Treasurer will hereafter be compelled to give a bond in such sum, and with such sureties as may be required by the By-Laws for the faithful performance of his duties.

## BOOK REVIEWS.

[Any book reviewed in these columns may be obtained upon receipt of price, from the office of the REPORTER.]

**RECHERCHES CLINIQUES ET THÉRAPEUTIQUES SUR L'EPILEPSIE, L'HYSTERIE ET L'IDIOTIE.** Compte rendu du service des enfants idiots, épileptiques et arriérés de Bicêtre pendant l'année, 1889.

**CLINICAL AND THERAPEUTICAL INVESTIGATIONS OF EPILEPSY, HYSTERIA AND IDIOCY.** From the service for idiotic, epileptic and feeble-minded children of the Bicêtre Hospital for the year 1889. By BOURNEVILLE, Physician to the Bicêtre; SOLLIER, Curator of the Museum of the Bicêtre; and A. PILLIET, Former Interne of the Service. Vol. x, 22 wood-cuts and one chromo-lithograph. 8vo, pp. lvi, 188. Paris: Office of the *Progrès Medical*, 1890. Price, five francs.

The first part of the volume before us contains the report proper of the Bicêtre Hospital, with the number of the patients, the classes to which they belong, and the general working of the institution. Following the report are articles on bromide of gold, bromide of camphor, and picROTOXINE. The first is believed to have a favorable action on nutrition, and some effect in modifying epileptic seizures. The bromide of camphor acts well in controlling epileptic vertigo. PicROTOXIN exerted no favorable influence upon the vertigo. Following these therapeutical papers, BOURNEVILLE contributes a very valuable article on "Myxoedematous Idiocy," fully illustrated. PILLIET follows with a paper on "Chronic Encephalitis of Childhood." The histological appearances especially have been studied. The next paper is on "A Family of Hysterical Patients," by BOURNEVILLE and SOLLIER; and, in a concluding paper BOURNEVILLE contributes a "Fresh Observation of Myxoedematous Idiocy."

The entire volume will be welcomed most warmly by all neurologists. We sincerely hope that it may be followed by many equally valuable.

**AN EPITOME OF TRIPLER'S MANUAL, AND OTHER PUBLICATIONS ON THE EXAMINATION OF RECRUITS.** BY CHARLES R. GREENLEAF, Major and Surgeon, U. S. A. 8vo, pp. 70. Washington, D. C.: William Ballantyne & Sons, 1890. Price, 75 cents.

Since the publication of Tripler's Manual, much has been written on the general subject of physical examinations, and a number of changes have been announced in such examinations for the United States Army. The author states this fact in the preface to this pamphlet, and says that the recent information on the subject has been incorporated in this "Epitome." The application of the vision-test is explained; in-

structions for chest measurements are revised, and the subject is in other ways brought up to date.

The Epitome will prove invaluable to recruiting officers, and we can cordially recommend it to all who are interested in physical examinations.

**TRANSACTIONS OF THE NEW YORK STATE MEDICAL ASSOCIATION FOR THE YEAR 1889.** Volume VI. 8vo, pp. 445. Concord, N. H.: Republican Press Association, 1890.

This volume contains the papers read at the sixth annual meeting of the New York State Medical Association, in New York, September 25-27, 1889. The President's address, by Dr. William T. Lusk, was on Tubal Pregnancy, and is a very able presentation of the subject. In addition to a number of interesting papers, there were two principal subjects of discussion: The Treatment of Hernia, and the New Hypnotics. Speaking of medical operations for the cure of hernia, Dr. Bull said that his sixty-nine cases gave sixty per cent. of cures and forty per cent. of relapses. He prefers the operation of ligation, with excision or drainage of the sac. The discussions upon both subjects were very free and full, and amply justified the wisdom of the Committee on Arrangements in selecting them.

The volume as a whole is a handsome one, and creditable in the highest degree to the Association, and to the Editor, Dr. Edward K. Dunham.

## SPECIAL ARTICLE.

### KOCH'S REMEDY FOR TUBERCULOSIS.

#### A RESUMÉ OF ITS HISTORY.

[Continued from page 25.]

The *Wiener Med. Presse*, Dec. 14, 1890, contains the text of the Decree of the Minister of the Interior of Austria regulating the use of the Koch lymph in the Austro-Hungarian Empire. This decree, on the ground that the lymph is a secret remedy with acknowledged dangerous properties, restricts its use to heads of hospitals and scientific medical institutions and physicians authorized to practice in the Empire. It indicates the source from which the lymph must be procured and provides for the making of full records of all cases so treated and the report to the authorities of the circumstances under which any death may take place.

The *Progrès Medical*, Dec. 14, 1890, says that the Germans are becoming more circumspect in regard to the cures—or rather ameliorations—effected with Koch's lymph. It cites from the *Internationale Klinische Rundschau*, Dec. 7, the case of a girl seventeen years old, at Innsbrück, who died after

an injection for lupus of the face. Reaction after injection of 2 milligrams was rapid and marked. The temperature rose to  $41.5^{\circ}$  ( $106.7^{\circ}$  Fahr.); the respiration became 60; the pulse became imperceptible, and the girl became unconscious and died in 36 hours, with signs of paralysis of the heart. The lymph was obtained from Dr. Libbertz (Koch's authorized agent). Every precaution had been used in diluting it. The autopsy furnished no explanation of the girl's death, which was the more unexpected because she was vigorous and well developed.

In the *Berliner Klinische Wochenschrift*, December 15, 1890, Dr. R. Heinz, of Breslau, publishes a paper on his experimental studies of iodide of potassium and proposes that this salt shall be systematically used in connection with injections of Koch's remedy, because of its apparent power to promote the activity of the leucocytes.

The *Bulletin Medical*, December 17, contains a report of a third lecture by Cornil, in which he speaks, after having used the Koch remedy on thirty patients, as to the temperature change and the variations in the oxyhemoglobin of the blood after its injection. As to the former, he calls attention to the way in which the lymph may seem to delay its action and then suddenly act with exceptional force. The oxyhemoglobin, he finds, diminishes, and for this reason he thinks that the remedy must be used with caution in pulmonary tuberculosis, except in cases in which fever is absent or moderate. He seems to think the remedy may be useful in lupus, but claims very little for it in phthisis.

In the same journal Lannelongue reports using the lymph upon a boy eight years old with lupus of the face. After the third injection he became quite ill; he had a confluent papular eruption and inflammation of the knee, the elbow, the wrist, the shoulder, the hip, and even of the cervical portion of the spinal column. Lannelongue says that if this had occurred after the first injection this would have been claimed to have revealed foci of latent tuberculosis; but as it came on eight days after the first injection it may be asked if it was not due to the action of the lymph setting up new foci of tuberculosis.

The Scotch correspondent of the *Medical Press and Circular*, December 17, 1890, says: "During last week at the Royal Infirmary of Glasgow three cases of lupus were treated with hypodermic injections of

Koch's fluid with the following results. In two of the cases so far as curative or other effect was observed they might as well have been injected with cold water, for neither beneficial nor prejudicial effect could be noticed. In the third case there was, to use the cant phrase which is on every person's tongue just now, a decided 'reaction.' The seat of the disease became swollen and congested, and coincident with the subsidence of these effects, and at the present time, the diseased parts certainly look more healthy. The inference drawn in such cases is that lupus is a tubercular disease, that tubercle is due to a microscopic germ termed the tubercle bacillus, and that whatever kills or causes the death of the bacillus, no matter in how roundabout a way, cures the disease; and phthisis pulmonalis as well as lupus consequently. Now it must be pointed out that pathologists are not at all agreed as to lupus being a tubercular disease, and it does not necessarily follow that if a remedy is found for lupus that the dreadful scourge of consumption would be equally amenable to the same influence. Here in three cases of lupus under the observation of the writer, but one of them responded to the Koch fluid, and it would be premature to say as yet that the disease is either arrested or cured in this one case. Again, most men of any experience in practice have occasionally experienced gratifying results in the treatment of certain cases of lupus, from well-known and ancient remedies of the pharmacopœia. The writer has cured cases of lupus more than twenty years ago, in the sense in which lupus is now said to be cured, by combinations of bichloride of mercury, iodide of potassium and arsenic (Donovan's solution), and he entertains the opinion that the hypodermic injection of these substances in proper quantity would yield results not inferior to those of Koch's fluid, so inordinately and so injudiciously vaunted. The French have had most favorable results with hypodermic injections of iodoform dissolved in olive oil. It is not a little significant in this relation that Billroth, of Vienna, a gentleman of acknowledged eminence throughout Europe, has expressed the opinion that as a curative agent in lupus iodide of potassium is superior to 'Koch's lymph.' In the case of the phthisical cases treated in the Royal Infirmary of Glasgow, a trifling reaction took place in one or two of them, that is to say, the temperature rose considerably, but so far as amelioration of the urgent symp-



toms was concerned, this existed only in the luxuriant imagination of the sanguine converts to the new doctrine. In other cases of undoubted phthisis no result whatever ensued."

The same journal says: "If Koch's lymph is scarce at Berlin it is abundant at Davos Platz, where the arrival of some twenty-five phials was announced a few days since, being enough to treat a thousand patients for a couple of months! Consumptive patients at Davos, however, probably feel pretty comfortable, for only about a hundred of the fourteen hundred tuberculous residents elected to undergo the treatment, the others preferring to run the risk of having to attend the funerals of those to be experimented upon."

In the New York *Medical Record*, Dec. 27, 1890, there is an article by Dr. H. P. Loomis, describing his trip to Berlin to get lymph for the Bellevue Hospital, and his observations and opinions. He has apparently been very much impressed by what he saw. Under the head of "Conclusions" he says: "If I were asked to express an opinion as to the efficacy of the new remedy, I should say I believe it to be as great a medical discovery as that made by Jenner; that it opens up a hitherto unknown field in the treatment of disease, which no one at the present time can limit; that it apparently cures lupus, as admitted by all observers. (1)" With regard to its curative power in pulmonary tuberculosis, he quotes the answers made to a series of questions he addressed to Prof. Leyden a few days before leaving Berlin. The substance of the answers is that Prof. Leyden has noticed permanent improvement in some cases of early phthisis following the use of the remedy, but thinks time can alone show how frequent such cases are; that he has seen improvement in some advanced cases; that he would use the remedy on his own child; that he favors its use in private practice; that he has seen disastrous effects following its use in unsuitable cases and in overdoses; that as a precaution he would administer small doses, beginning with from 1 to 5 milligrams;<sup>1</sup> that he continues constitutional treatment while using the remedy; and that it has no positive diagnostic value in all cases.

In New York experimentation with the lymph continues.

At St. Francis Hospital, December 24, Dr. George F. Shradley inoculated seven cases, two for tubercular disease of knee-joint; one for tubercular caries of wrist-joint; one for carious sinus of thigh; one for scrofulous sinus of groin; one case of incipient phthisis, and one case of phthisis in second stage. The latter was a patient of Dr. John H. Ripley. The inoculations were prepared under the supervision of Drs. Max Einhorn and E. C. Wendt, and according to the strict Berlin method.

The *Medical Record*, December 27, says that, in a general way it may be said that no new features have been developed. The reactions in the phthisis cases have been quite constant, as also in the cases of lupus, the latter having been reported as improving. The doses have generally been one milligram, which has been cautiously increased in accordance with the amount of reaction produced. As yet no accidents nor serious complications have occurred in connection with the inoculations; neither has there been any death attributable to their use.

## NOTES AND COMMENTS.

### Proposed Act for Medical Examiners for Pennsylvania.

*An Act to regulate the Practice of Medicine and Surgery, to establish a State Board of Medical Examiners and Licensers, to define the powers and duties of such Board, the qualifications of applicants for license, the manner of licensing, and making an appropriation for said Board.*

*Whereas*, The safety of the public is endangered by incompetent physicians and surgeons, and due regard for public health and the preservation of human life demands that none but competent and properly qualified physicians and surgeons shall be allowed to practice their profession:

SECTION 1. Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in General Assembly met, and it is hereby enacted by authority of the same, that within one month after the passage of this Act the Governor shall appoint a State Board of Medical Examiners and Licensers consisting of nine members, three to serve for one year, three for two years, and three for three years in the first instance, and thereafter annually

<sup>1</sup> A dose of 2 milligrams killed the girl at Innsbruck, spoken of above.—ED. REPORTER.

the Governor shall appoint three members to serve for three years in place of those whose terms then expire. The said persons so appointed shall be graduates of some legally-chartered college or university having the power to confer medical degrees, citizens of the United States and of this Commonwealth who shall have been in the active practice of medicine or surgery for a period of not less than ten years, but no two of whom shall be residents of the same county.<sup>1</sup> Each member of the said Board shall receive a certificate of appointment from the Governor, and shall file the same within twenty days with the Prothonotary of the Court of Common Pleas of the county in which said member is registered under existing law.

SECT. 2. The said Board shall be known by the name and style of the State Board of Medical Examiners and Licensers of the Commonwealth of Pennsylvania, and shall have a common seal, and may make and adopt all necessary rules and regulations and by-laws not inconsistent with the Constitution and laws of this Commonwealth, or of the United States, and shall have power to locate and maintain an office within this State for the transaction of business. Five members of the said Board shall constitute a quorum for the transaction of business.

SECT. 3. Every appointment to fill a vacancy or vacancies in the said Board shall be for the unexpired term, and the said vacancy or vacancies shall be filled by the Governor within sixty days after notification of the same by the Board, and he shall have power to remove any member of said Board for criminal, scandalous, or dishonorable conduct.

SECT. 4. The said Board shall organize at Harrisburg within three months from the date of their (its) appointment, and shall elect from its own number a President and Secretary who shall also act as Treasurer, both of whom shall hold their offices for one year, or until their successors are chosen.

SECT. 5. The members of the said Board shall each receive a salary not exceeding three hundred dollars per annum, to be paid out of the fees for examination. The Secretary-Treasurer shall receive an additional salary to be fixed by the Board, and shall file with the President of the Board a bond in the sum of one thousand dollars, conditioned for the faithful performance of

his duties. The necessary expenses of the said Board shall also be paid out of the fees, except as provided in Section 12 of this Act, and any balance remaining from the fees, after the disbursements herein specified, shall be paid into the treasury of the Commonwealth.

SECT. 6. The said Board shall examine all applicants for license to practice medicine or surgery in this Commonwealth who are properly qualified according to the provisions of Section 7 of this Act, and no one shall be excluded or rejected on account of adherence to any special system or school of practice. It shall hold two stated meetings in each year, one at Pittsburg on the first Tuesday of April, and one at Philadelphia on the first Tuesday of May respectively, and may hold special meetings at such times and places as it may deem proper. All examinations, when practicable, shall be conducted in writing, and all examination papers, together with the reports and action of the examiners thereon, shall be preserved among the records of the said Board for a period of five years, during which time they shall remain open for inspection at the office of the said Board.

The applicants shall be examined in anatomy, physiology, chemistry, toxicology, pathology, hygiene, materia medica, and therapeutics, principles and practice of medicine, surgery, and obstetrics, and each applicant upon receiving from the Secretary of the Board an order for examination shall draw by lot a confidential number, which he or she shall place upon his or her examination paper, so that when said papers are passed upon by the Examiners the latter shall not know by what applicant said papers have been prepared, and upon each day of examination all candidates shall be given the same set of questions. *Provided* that any candidate for examination may elect the system of materia medica and therapeutics in which he or she shall be examined.

SECT. 7. Any person on paying twenty dollars to the Secretary of said Board, and on presenting satisfactory proof of being over twenty-one years of age, of good moral character, and of having received a sufficient preliminary education, as defined by said Board, and a diploma from some legally-incorporated medical college or university having authority to confer degrees in medicine, shall be entitled to examination by the said Board, and in case of failure at any examination shall have the privilege of sub-

<sup>1</sup> And none of whom shall be member of the faculty or staff of any medical school or university.

sequent examinations without the payment of an additional fee. Each applicant who shall have passed a satisfactory examination shall receive from the said Board, under seal, a license to practice medicine and surgery in the Commonwealth of Pennsylvania, and the said Board may at its discretion grant licenses without examination to persons holding licenses from similarly-constituted boards of examiners or boards of health in other States.

SECT. 8. The Secretary shall record in a book to be kept for this purpose in the office of the said Board, the name, age, sex, residence, date, and place of examination, the examination number, the examination average on each branch, the general average, and date of issue of license, in case such license is granted. Said book shall be open to public inspection, and on or before the last day of December of each year the said Board shall publish, or cause to be published, a list of the names and addresses of such persons as shall have received licenses from the said Board within twelve months immediately thereto preceding.

SECT. 9. After the first day of July, Anno Domini one thousand eight hundred and ninety-one, no person shall enter upon the practice of medicine or surgery in the State of Pennsylvania unless he or she has complied with the provisions of this Act, and shall have exhibited to the Prothonotary of the Court of Common Pleas of the county in which he she desires to practice medicine or surgery, a license duly granted to him or her by the said State Board of Examiners and Licensers, whereupon he or she shall be entitled, upon payment of one dollar, to be duly registered in the office of the Prothonotary of the Court of Common Pleas in said county, and any person violating any of the provisions of this Act shall be guilty of a misdemeanor, and upon conviction thereof in the Court of Quarter Sessions of the county where the offence shall have been committed, shall pay a fine of not less than one hundred dollars nor more than five hundred dollars for each offence, one-half of which fine shall be paid to the prosecutor.

SECT. 10. Nothing in this Act shall apply to commissioned medical officers of the United States Army or Navy, or of the United States Marine Hospital Service, nor to any member of the house or resident staff of any legally-chartered medical college or university or hospital during his term of ser-

vice therein, nor physicians of other States meeting duly registered physicians in this State in consultation, nor to those practicing dentistry exclusively. And nothing in this Act shall be construed to prohibit the practice of medicine and surgery within this Commonwealth by any practitioner who shall have been duly registered before the first day of July, Anno Domini one thousand eight hundred and ninety-one, according to the terms of the Act entitled "An Act to provide for the registration of all practitioners in medicine and surgery," approved the eighth day of June, Anno Domini one thousand eight hundred and eighty-one.

SECT. 11. For the purpose of this Act, the words "practice," "medicine" or "surgery" shall mean to treat, operate on or prescribe for any physical ailment of another. But nothing in this Act shall be construed to prohibit service in cases of emergency or the domestic administration of family remedies.

SECT. 12. The sum of one thousand dollars, or so much thereof as may be necessary, is hereby appropriated to meet the necessary and legitimate expenses of the said Board for the year Anno Domini one thousand eight hundred and ninety-one.

SECT. 13. All Acts or parts of Acts of Assembly inconsistent herewith shall be and are hereby repealed.

### Medical and Surgical College of New Jersey.

The District Medical Society for the County of Hudson, N. J., recently adopted the following preambles and resolutions:

WHEREAS: A certain medical institute, called the "Medical and Surgical College of the State of New Jersey," chartered by special Act of this State, approved March 17, 1870, was organized during the year 1888, and opened in three small rooms on the top floor of the general office building, No. 47 Montgomery street, Jersey City; and

WHEREAS, Said alleged college has graduated several students whose diplomas have been presented to the Hudson County Board of Health, and who have been refused registration; and

WHEREAS, It has appeared to this Society, by good and sufficient evidence, that several members of the faculty, nearly all of whom are non-residents of this State, are either incompetent to deliver lectures on the topics assigned them, or are graduates of



disreputable or fraudulent medical colleges; that the facilities for instruction in said alleged college are totally inadequate, and that no clinics, dissections or hospital practice have been or can be given; that the provisions of the charter of said college have not been observed by the authorities thereof; that the requirements of said charter, even if the same were strictly followed, are far below the standard of minimum requirements of medical colleges adopted and demanded by all medical authorities at the present time, and that, therefore, the possession of a diploma from said alleged college is no proof whatever that the holder thereof has received a good and sufficient medical education; and

WHEREAS, The State Board of Medical Examiners of this State will introduce a bill at the next meeting of the Legislature for the purpose of repealing said charter:

*Be it Resolved*, That the District Medical Society for the County of Hudson does hereby earnestly protest against the existence of said alleged college as an unnecessary, inadequate and disreputable institution, tending to degrade and lower the standard of the medical profession; that the influence of this Society and of the individual members thereof be given to the support and passage of the bill to repeal said charter, and that a copy of this resolution be forwarded to the several medical societies of this State with requests for their support and influence for the passage of said bill.

These resolutions are attested by Henry B. Rue, M. D., Secretary, Jersey City, N. J., December 16, 1890.

[As the REPORTER exposed the methods of this "college" in an Editorial, August 24, 1889, it will be understood that we find no hesitation in supporting the purpose of the Hudson County Society and of the New Jersey State Board of Medical Examiners. It will be a good work if this Board can get the State freed from the institution which now bears its name.]

#### Dilatation for Dysmenorrhœa.

In the *Weekly Medical Review*, December 6, 1890, Dr. Paul J. Barcus, adopting largely the views of Dr. W. G. Wylie, of New York, makes a plea for rapid dilatation of the cervix uteri for dysmenorrhœa. Of the mode of carrying out rapid dilatation, he says that care in the selection of cases is not the only essential to successful treatment. The oper-

ation must be carried out in detail, and attention must be equally directed to the after-treatment, both constitutional and local. The proper time for operating is about one week after a menstrual period, which will allow sufficient time for the lacerated mucous membrane to recover before the next period. Before commencing, all peri-uterine tenderness must be subdued, as it gives no promise of good results if there is pelvic peritonitis or cellulitis, or any degree of inflammatory process in the adnexa. With these conditions present it becomes an operation fraught with great danger to the life of the patient. Endometritis or metritis without implication of the surrounding tissues, or flexions or versions do not contra-indicate.

A bivalve dilator should be used. The patient should be anesthetized, the blades should be introduced closed up to the shoulder, and should engage the internal os sufficiently to dilate it without slipping. The blades should be slowly and carefully spread to the extent of three-quarters or one inch and allowed to remain so for several minutes, care being taken to avoid slipping of the expanded blades out of the cervix, and consequent laceration of its tissues. The dilators being then removed, a hollow, hard-rubber stem should be introduced, one of sufficient length to engage the fibers of the internal os (about two and a quarter inches), and sufficiently large to maintain dilatation to some degree, and tapering from the point, the better to insure its retention. This should be supported for from twenty-four to forty-eight hours by a cotton tampon saturated with boroglyceride, by which time the fibers of the internal os will have contracted down upon the stem sufficiently to retain it in its place, without the assistance of the tampon. If the stem causes any degree of irritation it should be removed, to be reinserted when all irritation has subsided. But it will be found that but few patients will complain of it, and many will be ignorant of its presence if not so informed.

The patient should be kept in the recumbent position for four or five days, or until the immediate effects of the operation have subsided. If there is no obstruction of the stem, and it causes no inconvenience, it may be left in position during the next sickness. Ordinarily it should be removed before, to be reinserted again. The use of the stem obviates the necessity for using intra-vaginal pessaries, and for repeating the dilatation;

serves to correct the position of the uterus; and its presence within the canal and body of the organ seems to exert a therapeutic effect upon the mucous membrane and nerves distributed to those parts, and upon the nutrition and functions of the organ itself, that can hardly be accounted for by the better drainage and corrected position alone.

The condition of the patient is such that the constitutional treatment must be carried on at the same time, and with equal care. Most cases require a course of general tonics, and especial care as to the usual influence brought to bear upon the mind of the patient. They do better when removed from the sympathetic watchfulness of friends and relatives.

By carrying out this method of treatment but few cases will be found that cannot be relieved. Dr. Barcus's experience in the past convinces him that the large majority of so-called intractable cases are obstinate because of the imperfect manner in which the treatment has been executed.

### Testing Water.

Among the scraps of erroneous information which appear in scientific journals with more or less regularity, is one about testing the purity of water by the addition of a little pure sugar. It is said that when water is so treated, any organic matter present is after a time discovered in the form of black specks floating in the liquid.

This scrap is on its rounds again, having possibly made a transatlantic journey since its last appearance here, and the method referred to is now credited to a professor in a Western university.

The truth about the matter, as has before been stated in this journal, is that the test referred to was originally proposed by Heisch for the detection of a fungus supposed to be peculiar to sewage. Pure sugar was added to the suspected water in the proportion of about half a gram to 100 cubic centimeters in a stoppered bottle, and the bottle being placed in a strong light was kept at a temperature of 80° F. for several hours. It was then examined for the fungus, which if present was disclosed as a distinct turbidity to the naked eye, and under a power of 250 diameters was found to consist of small spherical cells. Heisch believed that the cells thus developed were distinct evidence that the water was contaminated with sewage, but Frankland showed that the

spores of this particular fungus were present in all waters that had been exposed even momentarily to the air, and that their development was due simply to the presence of phosphates in the water. The addition of even a minute trace of any phosphate was sufficient to develop the fungus in any water under the conditions above stated.

From this it will easily be seen that the so-called sugar test is not only of no value for the purpose for which it was recommended, but is positively misleading, and consequently dangerous.

It ought to be well understood that there is no "handy" test for the purity of water. It is sometimes easy enough to show very promptly that a given water is unfit for drinking, but to make sure of its safety is quite another matter.

It is very evident that the dissemination of misinformation on such a subject is calculated to do much harm, and those who are concerned with preserving health should not fail to show, whenever opportunity offers, the danger of forming conclusions as to the purity of water by "popular" or easy tests.—*Druggists' Circular*, December, 1890.

### Guaiaac as a Purgative.

Dr. William Murrell, Lecturer on Pharmacology at Westminster Hospital, says in the *Medical Press*, Nov. 5, 1890:

In our thirst for new remedies there seems to be a danger that some of our good old-fashioned drugs may be forgotten. Take guaiacum for example. In most of our textbooks on materia medica we are told that guaiacum resin acts as "a stimulant, diaphoretic and diuretic." I cannot find that there is much evidence in support of this view. Wood, of Philadelphia, seems to be of the same opinion, for he says: "Guaia-cum is believed by some to act as a diaphoretic, and to do good by increasing the elimination of the skin, but as I have not been able to obtain either from medical literature or from the exhibition of the medicine any distinctive proof of its having any such action to any marked extent, I have preferred to consider the drug as an alternative." Schmiedeberg, of Strassburg, curiously enough deals with it under the head of "Drugs and preparations used for all sorts of purposes but now mostly antiquated and obsolete." I am inclined to think that its main action is as a laxative or purgative, and this view is evidently shared by Dr. C.

D. F. Phillips, who, in his well-known work on the *Vegetable Kingdom*, states that in large doses it produces "dryness in the mouth, burning in the throat, a sensation of heat in the stomach, loss of appetite, heartburn, flatulence, nausea, vomiting and purging." My attention was drawn to the subject some two years ago by casually prescribing for a city man suffering from rheumatism some guaiacum lozenges made up with black currant paste. He continued taking them long after the pains had ceased, and his explanation was that they did him good by acting on the liver and bowels. He said that one or two of the lozenges taken in the morning before breakfast acted promptly and without inconvenience. I ordered the lozenges for other of my patients suffering from constipation, and what is conventionally called "biliousness," and the result was equally satisfactory. The lozenges not being available for hospital use I had a confection prepared containing ten grains of guaiac resin to a drachm of honey. This was curiously popular with the patients, and for the last two years I have used it extensively not only as a purgative but in the treatment of chronic rheumatism, sciatica, tonsillitis, dysmenorrhœa and allied affections. The confection is nasty, but is appreciated by patients. At first I gave it in drachm doses once a day, but they were not satisfied with this and I had to increase the dose to two drachms three times a day. In this quantity it seems capable of producing the maximum of inconvenience and discomfort, and gives unlimited satisfaction. The purgative effect is very pronounced, and in one case the patient had fifty-six evacuations in the week. In another case it produced a well-marked rash, covering the arms and legs with an eruption which forcibly reminded one of copaiba. That this rash is rare may be gathered from the fact that my colleague, Dr. C. T. Fox, had seen only one similar instance. It was accompanied by intense itching which disappeared on discontinuing the drug. The guaiacum not infrequently gives rise to a burning sensation in the throat, and to obviate this I prescribed the ten grains of the resin in half an ounce of extract of malt, which answered admirably. This method of treatment is, perhaps, simply a return to the old-fashioned "Chelsea Pensioner," which consisted of guaiacum, rhubarb, ginger, sulphur and certain other ingredients, but it is interesting nevertheless. I am sure that a trial of the

guaiacum resin as a laxative or purgative, according to the dose employed, will be found satisfactory. It is possible that if the drug were triturated with cream of tartar, sugar of milk, or some other equally inert substance, its efficacy would be increased, and it would produce the desired effect in smaller doses.

### Death from Injection into the Lung.

Dr. Robert T. French, of Rochester, N. Y., reports in the *Medical News*, Nov. 29, 1890, the following mishap, occurring in the treatment of phthisis by intra-pulmonary injection, is interesting. During part of the writer's term of service as house physician of the Buffalo General Hospital in 1888-89, a large number of cases of phthisis were treated by intra-pulmonary injections. The medicament used was a three-per-cent. solution of beechwood creasote in oil of sweet almonds. Of this about ten minims were injected at a time into a cavity or solidified apex. In most instances the immediate effects were very encouraging. The expectoration usually decreased, and the temperature, after the slight rise caused by the operation, fell, and continued for a time nearly normal. More than fifty such injections had been made with favorable results, when the following accident occurred.

The patient was well nourished, and under tonic treatment, and the disease seemed to be in abeyance. Three injections had been made, at intervals of four days, into the left apex, followed in each instance by decreased expectoration and marked diminution of evening temperature. The fourth injection was made by the usual method into the right apex, and the patient immediately after the procedure resumed his duties about the ward. Twenty minutes later he was seized with violent dyspnoea, which gradually became worse. He had formerly suffered from asthma, and the present attack resembled an asthmatic paroxysm. The irritation caused by the drug on the peripheral endings of the vagus seemed to afford a plausible explanation in support of this diagnosis. The usual remedies for asthma were administered, but all failed to give relief. Auscultation was rendered impossible by the violent tossing and groaning of the sufferer. About an hour and a half after the injection the patient died.

At the autopsy the right lung was found entirely collapsed and the pleural cavity



filled with air. The needle in entering the lung had passed through tissue as thin as ordinary writing-paper into an emphysematous space, communicating with a small cavity, which in turn communicated with a bronchus. After the puncture the thinness of the wall prevented it from retracting sufficiently to act as a valve, and the inspired air must have passed almost directly into the pleural cavity.

Cases of pneumo-thorax have been reported, following intra-pulmonary injection; but all were slight, and ended in recovery. Only one death immediately following this treatment is recorded, and in that case death was due to acute suppurative bronchitis. Had the pneumo-thorax been diagnosed in Dr. French's case at the outset of the attack he thinks it is possible that surgical interference might have saved the patient. The condition, however, was wholly unexpected, and was not recognized by any of the physicians who examined the case.

The slight benefits following this method of treatment are, in Dr. French's opinion, secured at too great a risk to make the procedure advisable.

### Hypodermic Use of Strychnia.

Dr. Harold N. Moyer, of Chicago, in a paper read before the Southern Surgical and Gynecological Association, at Atlanta, claimed that the irritating properties of Fowler's solution, when injected into the cellular tissue, were largely due to the presence of free arsenious acid. This objection to the hypodermic use of the drug had been obviated by employing a solution of the arseniate of sodium, a stable, neutral salt of definite composition. This salt could, he found, be injected beneath the skin without causing more irritation than would be produced by so much water. He confirmed Hammond's conclusions that arsenic was less poisonous when given by the hypodermic method than when employed by the mouth. He had had a similar experience, in administration of the drug by the mouth, to the utmost limit of toleration, until the eyes were reddened and the stomach disturbed. Then the use of the drug by the mouth was suspended, and an increased dose given hypodermically, with complete subsidence of the poisonous symptoms. The toxic properties of arsenic are largely focused upon the stomach, liver and upper end of the small intestine. If we adminis-

ter arsenic by the cellular tissue it immediately enters the general circulation and so avoids the selective action that the liver undoubtedly possesses for metallic salts. An analogous example was to be found in the use of mercuric salts, by inunction and injection.—*Weekly Medical Review*, December 6, 1890.

### Tannic Acid as an Intestinal Antiseptic Remedy.

Professor Cantani has written, in the *Wiener medizinische Blätter*, of his therapeutical trials of tannic acid in intestinal diseases. He has found it, in  $\frac{1}{3}$ ,  $\frac{1}{2}$ , or even in 1-per cent. solutions, acting a useful part as an antiseptic, as it hinders the vegetative activity of the microbes and renders innocuous many of the poisonous ptomaines. In diarrhoea and dysentery, therefore, tannic acid becomes an important disinfectant as well as astringent remedy. Mosler also reports that this drug is very beneficial in typhoid fever, particularly for removing the symptoms of meteorism and diarrhoea. Antiseptic solutions are best introduced by enteroclysis [injections into the colon], the fluid thus administered having been proved, by the subsequent vomiting of some of it, to reach not only the whole length of the intestines, but even to the stomach.—*New York Medical Journal*, December 6, 1890.

### NEWS.

—Dr. W. H. Elliot, of Houston, Texas, died December 23, 1890.

—Prof. Hyrtl, the Austrian anatomist, celebrated his eightieth birthday recently.

—Dr. C. H. Hall, of Boston, was arrested for alleged malpractice December 29, 1890.

—The new St. Christopher's Hospital, in Philadelphia, was opened December 29, 1890.

—Dr. George P. Wesselhœft, a well-known physician of Brookline, Mass., died December 29, 1890.

—H. A. Kelso, of Paxton, Ill., was assaulted and robbed in Chicago, on December 19, 1890. His skull was fractured.

—Dr. A. F. Holt, Surgeon-General of Massachusetts, died in Florida, December 28, 1890. He was fifty-two years old.

—Dr. John B. Hayes, a well-known physician of New York, was attacked by a highwayman, while walking through Union Square, early New Year's morning.

—A death under ether anæsthesia occurred in the St. Barnabas Hospital, Minneapolis, December 25, 1890. The patient was a well-built young man, with a tumor of the foot.

—Dr. Nathaniel R. Boutille, of Coatesville, Me., died December 22, 1890, of paralysis. He was almost seventy years old, and was a highly-esteemed citizen and practitioner.

—The American Chemical Society, at its concluding session in Philadelphia, December 30, took steps towards uniting with other bodies of chemists in the formation of a national organization.

—Dr. Theron Temple, of Waltham, Mass., died December 28, 1890, at the age of 57, after a long sickness. He had been city physician of Waltham and for several years in the Boston Custom House.

—Dr. Nicholas Senn in December resigned his Professorship of Surgery at the Rush Medical College, Chicago. The reason assigned is the refusal of Prof. Parker to permit Prof. Senn to deliver clinical lectures at the college.

—It is reported that physicians have been sent by the Russian government to Asia Minor to test by experiment the treatment of cholera with the ferubia sumbul, a plant growing in Turkestan and possessing antispasmodic properties.

—Dr Samuel G. Dixon, the bacteriologist of the American Academy of Natural Sciences, returned December 29, 1890, from Berlin, where he had been studying the merits of the Koch lymph on behalf of the Jefferson Medical College.

—Mr. John Ogden has associated with him Mr. W. S. Harvey as a partner in the drug business, conducted at Walnut and 13th streets and Arch and 19th streets, Philadelphia. Both stores will be conducted under the firm name of John Ogden & Co.

—A dispensary for the treatment of the diseases of women amenable to electricity has been opened at 1632 Cherry St., Philadelphia, under the charge of Dr. G. Betton Massey and Dr. Horatio R. Bigelow. Physicians are invited to bring or to send suitable cases on Mondays, Wednesdays or Fridays at 3 P. M.

—Dr. Edgar M. Green, of Easton, Pa., who was recently engaged to make certain chemical and microscopical investigations for the Court at that place, presented a bill for \$200 for his services. The County Commissioners refused to pay the bill, but

agreed to abide by an arbitration. The arbiters decided in favor of Dr. Green and said the bill was reasonable.

—The advent of the new year in Norristown was marked by the formal opening of the borough's first charity, Charity Hospital, which was then turned over to the public for its first inspection. It is claimed by the directors of the concern that it has more cubic inches of space per bed than any other charity hospital in the State.

—The new building of the Polyclinic Hospital, on Lombard street, above Eighteenth, Philadelphia, was opened for the reception of patients December 29, 1890. All the clinics were opened in the morning with their apparatus in full working order. The wards are not yet ready for the reception of patients, but are expected to be ready in about a week.

—According to the Bureau of Vital Statistics the health of New York, in 1890, was better than in 1889, as the death-rate was 24.66 per 1,000, against 25 last year. This calculation, however, is based on an estimated population of 1,631,232. There were 40,230 deaths in the city during 1890, or an average of one in every 13 minutes during the year. In 1889 the deaths were 39,583. There were 39,250 births and 14,992 marriages. Over one-fourth of all the deaths were of children under 1 year old. Phthisis and pneumonia were the chief causes of death, they being responsible for 10,418 of the deaths. There were only two fatal cases of small-pox.

#### OBITUARY.

L. M. HUBER, M. D.

Dr. Lee Huber died in Rocky Ford, Col., December 18, 1890. He was born in 1853 in Lancaster Co., Pa., and was graduated in 1877 from the Millersville State Normal School, of his native State. Some time after that he received a degree from Lafayette College. In the fall of 1882, he entered Jefferson Medical College, of Philadelphia, and in 1884 was graduated from that College, taking the first prize in obstetrics. He then located and entered into a promising practice in Chicago, but his health failing him, he moved to the far West, where his life was terminated by consumption.

He was a contributor to the MEDICAL AND SURGICAL REPORTER, whose papers were always interesting and instructive.